

# HEALTH MANPOWER LEGISLATION, 1975

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HEARINGS  
BEFORE THE  
SUBCOMMITTEE ON HEALTH  
OF THE  
COMMITTEE ON  
LABOR AND PUBLIC WELFARE  
UNITED STATES SENATE  
NINETY-FOURTH CONGRESS  
FIRST SESSION  
ON  
**S. 989**

TO AMEND THE PUBLIC HEALTH SERVICE ACT TO REVISE  
AND EXTEND THE PROGRAMS OF ASSISTANCE UNDER  
TITLE VII FOR TRAINING IN THE HEALTH AND ALLIED  
HEALTH PROFESSIONS, TO REVISE THE NATIONAL  
HEALTH SERVICE CORPS SCHOLARSHIP TRAINING  
PROGRAM, AND FOR OTHER PURPOSES

AND RELATED BILLS

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**PART 3**

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SEPTEMBER 30; OCTOBER 29, 30, AND 31, 1975



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## HEALTH MANPOWER LEGISLATION, 1975

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### Specialty Maldistribution

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TUESDAY, SEPTEMBER 30, 1975

U.S. SENATE,  
SUBCOMMITTEE ON HEALTH OF THE  
COMMITTEE ON LABOR AND PUBLIC WELFARE,  
*Washington, D.C.*

The subcommittee met, pursuant to notice, at 10:10 a.m., in room 4232, Dirksen Senate Office Building. Senator Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy and Stafford.

Committee staff present: LeRoy Goldman, professional staff member; and Jay B. Cutler, minority counsel.

Senator KENNEDY. We will come to order.

Today the Senate Health Subcommittee resumes its hearings on health manpower. Today's hearing focuses specifically on one of the most complex health manpower problems the Nation faces—specialty maldistribution of physicians.

This is a problem which is national in scope. It has existed for decades. It is growing worse, not better. The attempts by the voluntary sector to come to grips with it have, for the most part, been demonstrable failures.

The very heart of the Nation's medical education system, with its emphasis upon highly specialized research, is intimately involved in the problem. The demands of hospitals, especially medical school affiliated teaching hospitals, for a source of cheap labor is central to the persistence of the problem. And yet these schools and their hospitals continue to call for increased public support.

During the 1960's and 1970's, while there was a significant increase in the supply of physicians, the absolute number of primary care physicians decreased. There is now evidence, which to me is compelling, that there are too many specialists in this country, particularly surgeons.

For example, 47.9 percent of all active non-Federal physicians were in primary care in 1963 as opposed to 44.9 percent in 1972. This difference is far greater if the number of internists who enter subspecialties are excluded from the total.

For the same period, the number of general practitioners dropped from 25.6 percent to 15.8 percent. In addition, of the 51,115 residency positions offered in 1972, only 17,934 were in primary care, of which 2,089 were unfilled.

The recent study conducted by the American College of Surgeons and the American Surgical Association contains data which I believe lead to the conclusion that legislative intervention is an essential ingredient in the solution of this problem.

Last year, my committee reported legislation which would have vested authority in HEW to limit the overall number of approved residency positions. And also required that a more appropriate balance be struck between primary care and specialists' trainees.

Last year, the House passed a bill which would have vested similar authority in the Coordinating Council on Medical Education. This year those same provisions were struck from the House bill on the floor in their entirety.

I am committed to the position that the Senate bill in 1975 must contain a program which will aggressively and effectively deal with this problem. It is too late to call for another study. It is too late to throw up our hands at a problem which is seemingly so complex that we must do nothing.

It is not too late to devise a workable program of shared responsibility between Government and the voluntary sector. That is what today's hearing is all about. That is what I hope today's witnesses will bring to this committee.

I know it is not an easy challenge to see how best this problem can be met. I think we have made some extremely important progress with the administration, and certainly with the members of this committee, and a number of other different manpower programs.

The administration's testimony which we heard here some 10 days ago I thought was, as I stated to Dr. Cooper and members of the administration, a very positive response to problems which we have been facing here for some period of time.

I understand that this position which was accepted by HEW was a policy decision that was, according to my information, ultimately made by the President himself.

We have been able to work with some of the really more enlightened deans and other medical school personnel, and I think we are on the track, and am hopeful, as a result of the hearing this morning, that we can be more on the track in this particular area.

Our first witnesses this morning are Dr. George D. Zuidema and Dr. Francis D. Moore.

Dr. Zuidema is the Warfield M. Firor professor and director, surgeon-in-chief, section of surgical sciences, Johns Hopkins University School of Medicine, Johns Hopkins Hospital.

Dr. Moore is Moseley professor of surgery at Harvard Medical School, and surgeon-in-chief at Peter Bent Brigham Hospital.

It is a pleasure to have both of you here this morning.

Dr. Zuidema.

**STATEMENTS OF GEORGE D. ZUIDEMA, M.D., WARFIELD M. FIROR PROFESSOR AND DIRECTOR, SURGEON-IN-CHIEF, SECTION OF SURGICAL SCIENCES, JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, JOHNS HOPKINS UNIVERSITY; AND FRANCIS D. MOORE, M.D., MOSELEY PROFESSOR OF SURGERY AT HARVARD MEDICAL SCHOOL, AND SURGEON-IN-CHIEF AT PETER BENT BRIGHAM HOSPITAL**

Dr. ZUIDEMA. I appreciate the opportunity, Senator Kennedy, to be here this morning, and would like to point out that the testimony which I have presented represents my own opinions, although it is based, in large part, on the study which we have recently completed on surgical manpower planning.

There are a number of issues which require attention prior to addressing any solution to the problem.

The first of these is the need for a clear definition of specialty credentials and information as to who is performing surgery in the United States.

We found in the manpower studies of Dr. Moore's group, that fully one-third of the surgical manpower pool by definition in this country is made up of noncertified surgeons and general practitioners; that the area studies that were reported by Dr. Moore indicated that these groups were performing between 32 and 41 percent of the operative work in the areas under study.

Obviously, any solution to the manpower problem is based upon a solution to this issue.

A second feature, which Dr. Moore will address in more depth, is the distribution of surgical specialists throughout the United States, which we found has been relatively good throughout this country.

[The biographical sketch of Dr. Zuidema follows:]



GEORGE DALE ZUIDEMA, M.D.

DOB: 3/8/28, Holland Michigan

Education:

Hope College, Holland, Michigan, 1946-49, A.B. Summa Cum Laude  
The Johns Hopkins University School of Medicine, 1949-1953, M.D.

INTERNSHIP: 1958-1954 Massachusetts General Hospital, Boston, Mass.

ASSISTANT RESIDENT: July 1, 1954 - September 30, 1954 and February 1, 1957  
through December 31, 1958 Massachusetts Gen. Hospital

CHIEF RESIDENT SURGEON: 1959 Massachusetts General Hospital

Academic Appointments:

American College of Surgeons, Fellow 1962  
American Board of Surgery, Diplomat, 1960  
Society of University Surgeons, 1961  
American Surgical Association  
Institute of Medicine, NAS  
Chairman, SOSSUS Study 1970-1975

Warfield M. Firor  
Professor & Director  
Section of Surgical Sciences  
The Johns Hopkins University School of Medicine

Surgeon in Chief  
The Johns Hopkins Hospital

Dr. ZUIDEMA. There are approximately 40 surgeons per 100,000 in our cities, whereas the ratio is closer to 20 surgeons per 100,000 population in our rural areas. In large part, this is accounted for by the need for highly specialized workers to be concentrated in urban areas.

Third, what needs to be considered is the growth rates for each of the surgical specialties for the past 20 years. Where the annual growth rate over the past 20 years averages approximately 4.5 percent, several specialties have been growing more rapidly, at an annual rate closer to 10 percent over the past decade.

At the same time, there are about 4,000 vacant but approved residency positions in surgery specialties in the United States. These positions represent virtually unlimited training opportunities for either U.S. or foreign medical graduates.

All of these factors, as well as many others, which impinge on the problem, require the serious consideration of all members of the profession.

A basic prerequisite then is the necessity to deal with the matter of hospital privileges for the performance of major surgery.

We feel that a deliberate transition from the present state to a more closely regulated state in this regard would be desirable because we are unable to judge the impact of immediate rulings on surgical care in this country.

The second step would be the necessity to curtail the further expansion of the group of noncertified surgeons who would otherwise practice in this country. At present, at least failure to achieve board certification does not limit one's ability to practice surgery provided he can obtain hospital privileges.

Furthermore, we are familiar with the high failure rates for the respective board examinations. For example, the American Board of Surgery failure rate in the part I examination for United States and Canadian graduates averages 14 percent, and for foreign medical graduates has averaged 50 percent over the past 5 years.

While we measure specialty growth by the number of diplomates in the pool of practicing surgeons, this is deceptive as long as those who fail the examination also go out to practice surgery. Unless some steps are taken to control the movement, the size of the pool of uncertified surgeons will continue to expand.

The high failure rate is, of course, a cause for concern for it indicates either inadequate professional background or poor educational settings for the unsuccessful candidates. A partial solution to this problem could be found in altering our certification procedure to require a mandatory inservice qualifying examination similar to the first part of the fellowship in the Royal College of Surgeons in England.

Successful passage of this examination would be required of all surgical residents, in all surgical specialties, prior to entering the later years of their training. This could function as an effective screening mechanism so that the final examinations would not have to serve this purpose, and the failure rate consequently could be expected to fall.



If we continue to train surgical residents at the present rate, we will observe at least a 17-percent increase in the ratio of surgical specialists per 100,000 population over the next 20 years. If we regard our present ratios as ample, we must seriously question the wisdom of that kind of further growth.

While we recognize that today's ratios may not represent the ideal, nonetheless it is difficult to demonstrate that there are serious gaps in surgical care in this country at the present time. The SOSSUS Manpower Committee considered a series of projections, one of which would provide for the modest increase in the ratio of surgical specialists to population at the rate of 1 percent per 5 years, with the understanding that with careful and continuing collection of data that this could be adjusted to meet changing national or population needs.

This would then permit us to project the numbers of individuals which should optimally be certified in each specialty, and as a total, in terms of the percent of those produced during the past 5 years. If such a schedule is adopted, the specialist per population ratio would grow gradually from 26.98 per 100,000 population to 28.83 per 100,000 population over the next 37 years.

If such a transition is to be undertaken, there is a variety of steps which would have to be undertaken and considered. The first of these would be agreement to settle upon the annual production rate of approximately 2,000 certified surgical specialists to go back for the initial level, and then adjust that annually to maintain the proper specialists-per-population ratio.

It should then be possible to have such a policy implemented through the voluntary accrediting agencies now in operation, namely the Coordinating Council on Medical Education, CCME, and the Liaison Committee on Graduate Medical Education, LOGME. National interest and concern with the current status should prove to be an effective incentive in effecting this agreement.

Second, the curtailment of residency positions should be developed through a transition period, beginning with the restriction of first year positions available, and proceeding over the subsequent 5 or 6 years until all individuals now in training would have had an opportunity to complete their residencies.

We should bear in mind that the number of first year positions in general surgery must also accommodate the positions available for individuals later entering the surgical specialties, since they all undergo basic training for the first year or two.

The mechanism by which this cutback could be carried out would involve the initial elimination of programs which are either poorly filled or those which have poor training records. A number of other factors, of course, would play a role in that selection.

I would recommend that the establishment of mandatory qualifying inservice examinations in all surgical specialties would help by limiting the individuals in training to those best qualified and upgrade the quality of those performing surgery.

A system for continuing annual data collection will be essential if the production of surgical specialties is to be flexible and adjustable to meet national needs which may change in time.

Indeed, the same requirements should hold for manpower projections of generalists or specialists of any kind. It would be foolish to lock into a system based on present projections only to find that it is impossible to adapt at a later time as our patterns of health care change.

I think, at this point, it is also important to note the need to measure the impact——

Senator KENNEDY. Could that be made a requirement in order to practice in hospitals?

Dr. ZUIDEMA. Excuse me?

Senator KENNEDY. Could that be made a requirement in order to practice in hospitals?

Dr. ZUIDEMA. Could what, Senator?

Senator KENNEDY. Examination.

Dr. ZUIDEMA. I think the examination should be taken at the end of the first or possibly the second year of training so that the inadequate candidates would not proceed further with their training, and would not invest 4 or 5 years of their lives and then not be permitted to practice.

It would be necessary for them to continue their education, in other words.

I think it is important to begin to measure the impact of loss of training programs on the hospital based practice of surgery. New ways will have to be found to meet many of the service functions which are now performed by surgical interns and residents. Whether these services will be performed in the future by surgeon's assistants or by certified surgeons working in somewhat different roles, the surgeon's workload will obviously be increased.

Information regarding these effects should be fed back into the manpower computer for at least an annual reassessment of the number of surgical trainees required. It is too early to make a firm prediction on the data currently available to us.

I believe it is essential that we develop some policy on the number of foreign medical graduates admitted to all training programs which has been steadily increasing. This is admittedly a complex issue, but it has obvious significance to several disciplines such as thoracic surgery, general surgery, pathology, and anesthesiology, where the number of FMG's entering training range from 30 percent to more than 50 percent of the total number of trainees.

If FMG entrance into the system were to be cut abruptly, the effect might be quite unpredictable. Any such limitation which might be imposed should probably be achieved over a period of several years to allow for a smooth transition to a new steady state of specialist production. It may be that by restricting the number of residencies and upgrading their quality that the entrance to surgical training programs would become highly competitive and that this issue for surgery may solve itself. The effect of diverting large numbers of foreign medical graduates into other specialties, however, cannot be ignored.

I think it is also important to consider the effect which a restriction of the output of surgical specialists might have on the geographical distribution of surgeons.



With a cut of approximately 23 percent, as proposed in the output of qualified surgeons, there may be significant effects on the distribution of surgical services. Undoubtedly, many noncertified or general practitioner surgeons may be performing highly useful services to people in areas which might otherwise be underserved and local review mechanisms may recognize their contributions.

To address this problem successfully will require multiple approaches, including the initiation of studies into alternative ways of delivery medical care, such as setting up practice groups to serve regional areas, or upgraded transportation systems being provided to bring the patient to an environment where quality care can be provided.

Additional incentives should be explored to encourage surgical specialists to practice in underserved areas.

It is my feeling that an overly aggressive plan, attempting to cut surgical residencies in university medical centers can be expected to have serious side effects in the following ways:

It would penalize the training programs which, in general, are of high quality.

It would weaken surgical education, aimed at the undergraduate teaching of all medical students, including students destined for family practice.

It would have an undesirable effect on the surgical care of patients in university medical centers.

Medical schools vary widely in their strengths and their objectives. The application of any formula for postdoctoral training positions which would apply across all of our schools in any uniform fashion would be likely to have an adverse effect on medical education in general.

It would jeopardize our future output of teachers and investigators with a serious penalty in terms of long-range effectiveness of our schools.

The overall regulation of medical and surgical manpower should be vested in the Coordinating Council for Medical Education. The CCME has reasonable representation and should be encouraged to accept this assignment. The existing ties with residency review committees and the Liaison Committee for Graduate Medical Education, LCGME, are already functioning. Alternative methods would involve costly duplication.

Senator KENNEDY. Dr. Moore.

Dr. MOORE. Thank you, sir.

It is a pleasure to be asked to testify.

I would like to call your attention to my prepared statement and skip over the first two pages, which just supply some biographical material and some bibliographic data which may be of interest, and go straight to the third page which is my own interpretation.

[The biographical sketch and prepared statement of Dr. Moore follow:]



STATEMENT FOR CONGRESSIONAL COMMITTEE HEARING ON MEDICAL MANPOWER LEGISLATION  
AND MALDISTRIBUTION OF PHYSICIANS - SEPTEMBER 30, 1975

STATEMENT OF FRANCIS D. MOORE, M.D.

I. BIOGRAPHICAL DATA

Dr. Moore is a native of Evanston, Illinois (b. 1913) and a resident of Brookline, Massachusetts since 1935. He attended Harvard College and Harvard Medical School; was Intern and Resident at the Massachusetts General Hospital; in 1948 was appointed Moseley Professor of Surgery at Harvard Medical School and Surgeon-in-Chief at Peter Bent Brigham Hospital in Boston, a teaching hospital of the Harvard Medical School. Dr. Moore has been engaged in this work for the two institutions for the past 27 years.

Dr. Moore is a teacher as well as a practitioner of surgery, with a particular interest in carcinoma of the breast, surgical metabolism, and the biochemistry of convalescence; the distribution and quality of surgical care.

Dr. Moore has been concerned with matters of quality and distribution of surgical care for many years. In April, 1970 Dr. Moore was appointed Chairman of a "Steering Committee on Distribution and Adequacy of Surgical Care" for the American College of Surgeons. This was then combined with the national surgical study known as "Study on Surgical Services of the United States", chaired by Dr. George Zuidema. Dr. Moore was made Chairman of the Manpower Subcommittee of this Study.

As a teacher of surgery Dr. Moore has visited many hospitals both large and small, throughout the country. The graduates of his teaching programs are engaged in the practice of surgery and related specialties in many cities and towns throughout the country. Dr. Moore has visited many teaching centers and community hospitals both in the U.S.A. and in other countries particularly Western Europe, Canada, Australia-New Zealand, as well as some of the developing countries, particularly the Middle East, Thailand and India.

In the course of the work of the Manpower Subcommittee of SOSSUS Dr. Moore arranged a close collaboration with the Department of Preventive and Social Medicine at the Harvard Medical School (headed by Dr. Osler L. Peterson) who joined with Dr. Moore's research team in developing a large amount of data on the training, distribution and practice of specialists and generalists in the United States. These data cover not only surgeons and the surgical specialties, but many closely related fields of Medicine and Anesthesiology, Radiology and Pathology.

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STATEMENT OF FRANCIS D. MOORE, M.D.

II. SUMMARY OF DATA AVAILABLE

Through the work of the Manpower Subcommittee of the national surgical study (SOSSUS) a large amount of new data are available on the distribution of physicians and surgeons in the United States. This Study was financed in part by DHEW, and in part by the Foundations. The Summary Volume was published August, 1975 and is generally available. Many additional manpower tabulations are available in the "Long Form Report" which is being printed separately but which is now available through the SOSSUS central office (Dr. Zuidema) or through the office of Dr. Moore in Boston.

Data of particular interest to those concerned with legislative manpower planning are as follows:

1) State-by-State data for each of the 50 States including information on numbers, population ratios, and distribution of physicians and surgeons in metropolitan areas and in all the rural counties for

- 1) Total Surgeons
- 2) The surgical specialties considered separately (General Surgery, Neurosurgery, Ophthalmology, Obstetrics-Gynecology, Otolaryngology, Orthopedics, Thoracic Surgery, Plastic Surgery, Urology, Colo-rectal Surgery)
- 3) Internal Medicine
- 4) Radiology
- 5) Anesthesiology
- 6) Pediatrics
- 7) Psychiatry/Neurology

2) Charts and data contrasting urban as versus rural distribution of specialists in various fields both surgical and non-surgical, including primary care.

3) Current numbers and future projections for the Nation as a whole for the same medical personnel. Population ratios have been worked out through the year A.D. 2000 using figures from the Bureau of the Census, corrected rates of death and retirement, and current residency production rates for all the medical and surgical specialists.

4) Estimate of Medical Student career choices in relation to the rapidly increasing size of the American medical class; analysis of the impact of Foreign Medical Graduates.

5) Recommendations for guidelines and monitoring of surgical residencies to meet annual manpower goals through the year A.D. 2000. These goals represent a downward revision of total surgical manpower; data are presented to support the need for these specific manpower goals, as well as the residency guidelines that should be used to implement them.

6) Similar projections for closely related fields including general medicine and medical specialties, to identify those fields or geographical areas that are in short supply and where manpower goals should mandate an upward adjustment of physician numbers.

STATEMENT FOR CONGRESSIONAL COMMITTEE HEARING ON MEDICAL MANPOWER LEGISLATION  
AND MALDISTRIBUTION OF PHYSICIANS - SEPTEMBER 30, 1975

STATEMENT OF FRANCIS D. MOORE, M.D.

III. STATEMENT OF DR. MOORE'S INTERPRETATION OF CURRENT AND PROJECTED  
MANPOWER DATA

1) Perfection in medical care for the population of the United States depends upon an effective balance between primary care physicians and specialists who can provide hospital back-up and special services. This balance is needed not only for medical personnel but also by regions. This balance involves close working relationships between small hospitals or community health units and the larger referral centers. The primary care physician is helpless without a reliable back-up of specialists who can assist him with difficult problems. The specialist is, in a sense, wasting his time if he engages in primary care, when that is not the work for which he was trained.

2) It appears at the present time that the primary care deficit in this country is only in part a deficit of manpower. Some estimates (including our own) suggest that 46-48% of the physicians in this country are engaged in primary care of one sort or another. This includes General Practice, Family Practice, Family Internists, Pediatricians and certain aspects of Obstetrics and Gynecology. Instead, the deficit in primary care appears to be that of access-modes and first-visit financing as well as problems of language and of ignorance of the ways in which physicians can help people.

3) It seems clear that increasing and improving access-modes together with an approximately 10% increase in primary care physicians (with an improvement in regional referral mechanisms for specialty back-up) would be a significant step towards improving medical care in the United States. The trend is already strong in this direction. Financial support from both local and Federal governments should help further this trend without the necessity of restrictive penalties or elaborate personnel-constraints requiring a new Federal enforcement agency.

4) The forthcoming large increase in the size of American medical School classes will have a major impact on medical manpower in this country. The class size has increased from approximately 9000 per year in 1965 to approximately 14,000 per year in 1977; we estimate that this will stabilize at approximately 15,000 per year by 1980. Of this class of 15,000 approximately 20% are expected to be women. Although all fields of medicine and surgery will be delighted to recruit young women into their ranks, we can say with assurance that young women will chose a different set of specialties for their career choices, than have men in the past. This is based on the experience of Great Britain wherein many young women have been in medicine for at least 50 years and yet career choices towards surgery and other highly referred specialties have been relatively infrequent. Experience in the last five years suggest that American women are going to select surgery and the other highly referred specialties such as Radiotherapy, Radiology and Anesthesiology in greater numbers than they have in Great Britian, but this will still be far less than the former figure for men which showed that approximately 25% of graduates selected a surgical career during the period 1920-1975.



5) It is for this reason that it would seem to be most unwise at this particular time to introduce rigid Federal legislation involving fiscal incentives or disincentives or a system of enforced service. We are in a very rapidly changing era. The trends at present look very healthy with a much greater interest in primary care and general medicine amongst both men and women in medical schools. Federally enforced manpower legislation passed at this time is apt to find itself obsolete within a few years because of the entirely different make up of the younger generation in medicine.

6) The problem of Foreign Medical Graduates demands a solution. It is unfair to American youth to deny them easy admission to the practice of medicine (our enlarged class size being still far below the number of applicants) while at the same time admitting 6000-8000 graduates of foreign schools to practice medicine in this country. It is likewise an injustice to the countries whose taxpayers have financed the education of these personnel.

7) According to our data approximately 12% of Foreign Medical Graduates currently in residency training in this country, are United States citizens. For the rest, some sort of modest restriction should be introduced to the Bureau of Immigration.

8) Our data would suggest that a number of Foreign Medical Graduates approximating 1000-1500 per year, entering the United States, (i.e. about 10% of total entry into the practice of medicine) would be "reasonable". These personnel should obviously go through the same sort of stiff examination and certification requirements that our own young people are required to pass. There is no evidence to support the concept that some sort of a medical manpower shortage in this country is being solved by the importation of Foreign Medical Graduates. They tend to cluster in large cities and choose highly referred specialties. They are not always easily assimilated into small communities especially if they have a language problem. These statements are made with the full realization of the immense historic debt that the United States owed to all of our medical colleagues, teachers and investigators in Western Europe, who, over the past 200 years have contributed so richly to American Medicine.

9) Distribution of surgeons by geography. The surgeon requires a hospital for his work. Following World War II there was a tremendous increase in the number of highly qualified and Board Certified surgeons entering practice in the United States because, during World War II, there was a marked reduction in the number of years required for training. The sudden increase in total numbers of surgeons observed during the years 1950-1970 was associated with the construction of many new hospitals, many of them in smaller communities, many under the Hill-Burton Act and all of them with the help and assistance of community surgeons who wished to improve the quality of surgical care given to the people of their communities.

10) The result of these forces is the fact that surgeons are distributed in this country in a remarkably even proportion to available general hospital beds. These specific data and numbers can be displayed if the Committee so wishes. Surgeons are less abundant in rural communities. This is appropriate since several of the surgical specialties (Neurosurgery, Thoracic Surgery, Plastic Surgery and certain types of corrective Orthopedic Surgery) should only be carried out in large, well-organized central referral units.

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11) It is notable that in the South-Central and Southeastern portion of the United States there is a lower ratio of hospital beds to population than in other parts of the country; associated with this is a lesser distribution of surgeons. The ratio of surgeons to available beds however is about the same. One can conclude from these data, which are supported by extensive tabulation in the publications mentioned above, that some portions of the South have fewer surgeons. Our data show that this is associated with higher annual surgical workloads for those surgeons. It appears that this "maldistribution of surgeons by geography" is more closely related to the availability of total medical and surgical facilities (as represented by hospital beds ) than any other factor.

12) Distribution by Specialty. The trend toward the practice of highly specialized medicine, both in Medicine, Surgery, Pediatrics and Psychiatry and all their various divisions, became most noticeable after World War II.

The major downward constraint in this choice of specialties has been the system of American Board examinations, which have sought to limit the number of people entering the specialty to those who can show the credentials of extensive training and pass advanced examinations. The American Board System began to evolve right after World War I, was accelerated in the middle 1930's and reached its present state of development after World War II.

13) The surgical needs of this country can be met by the 52,000-55,000 Board Certified surgeons (including General Surgery and the nine specialties) with approximately 10,000 trainees working with them in hospitals (at total of 62,000 - 65,000 physicians).

14) At the present time 2200-2500 men and women are entering surgical practice each year. It is our belief that for the next 8 years this should be reduced to a number approximately 1600-2000. The growth of the population will then "catch up" and the number could be increased to approximately 2000 per year, stabilizing the number of surgeons at 26 per 100,000 population through to the end of this century. Such a number (approximately 52,000-55,000) is approximately 16-18% of total active practitioners. This is a ratio compatible with experience in other countries especially Western Europe.

15) It is obvious from this constraint on surgical entry that there must be an equally strong effort made to increase recruitment in certain special fields that are currently under-recruiting from American graduates. Several fields of medicine currently show, in their present residency cohorts, ratios as high as 50-65% of Foreign Medical Graduates. Many of these fields are of critical importance to the practice of high quality medicine and surgery and every effort should be made to increase recruitment into those special fields as well as into the already much more numerous fields of Primary, Family, and Family-Practice Internal Medicine which appear to be increasing their recruitment at this time anyway.

16) The various conjoint committees and boards associated with this system including the Coordinating Committee on Medical Education (CCME) should be given the major task of further evolution in this area. It is noteworthy that when the British established a National Health Service in the period 1946-1950, they supported and strengthened their own voluntary credentialling system (The Royal College of Medicine, Surgery, Radiology, Obstetrics, etc) rather than destroying them and seeking to

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replace them by some other set of agencies in the Federal sector.

17) The choice of Surgery by almost 25% of American Medical Graduates can no longer be supported as a numerical policy. The guidelines developed by our Committee call for a sharp reduction in the total number of surgeons being graduated from the residency programs in this country (as enumerated by the number passing the American Boards and thus entering practice). Without such a restriction, the total number of surgeons in the country would grow from the present figure of approximately 24 surgeons per 100,000 population to approximately 30 surgeons per 100,000 population in 1990-2000 an excessive figure.

18) The number of persons carrying out surgical operations in this country has been high not only because of the number of persons selecting extensive surgical training and American Board examinations, but by the large number of general practitioners and partially qualified personnel undertaking surgery. This group is of an older age distribution as is being reduced in numbers by many factors most especially by stricter hospital credentialling.

19) In summary, the downward constraint of surgical residency production rates of personnel, upward recruitment efforts in certain fields that currently attract relatively few American Graduates, and a continued emphasis on the already well-established trend for more young people to enter the primary care fields, should help to rectify our manpower disorders without introducing a system of penalties, fiscal incentives or other complex federal regulations; the change in class composition makes this a period of rapid change in manpower planning and a poor time to introduce fixed or inflexible regulations.



Dr. MOORE. My first statement really reflects exactly what you said at the outset, that perfection in medical care for the population of the United States depends upon an effective balance between primary care physicians and specialists who can provide hospital backup and special services, and we cannot view good health care in surgery, as in medicine, radiology, anything else, alone. You have to look at the total mix of physicians that are trying to help the public.

Our data are based on that. We have looked at the whole picture carefully.

The second point is that the deficit in primary care may be very real, but our data would suggest—and it is interesting that the Institute of Medicine and the Macy Commission have recently come up with very similar numbers—there are quite a lot of people giving primary care in this country—those in general practice, family practice, family internists, pediatricians, obstetricians, and gynecologists, and that a 10- or 15-percent increase in this group is going to come very naturally with the current increase in class size.

However, it is really access-modes and first-visit financing that are most needed.

The general practitioner and family practitioner groups are improving the residency programs. They are doing a great deal to increase recruitment, and I think we are going to see that situation greatly improved.

Next, I think we should all realize that we are undergoing a remarkable numerical revolution in medical education in this country. The medical class size in the United States (that is, undergraduates) has increased from approximately 9,000 to 14,000 within the last few years. We estimate that it will stabilize at 15,000 per year by 1980. Other agencies that are very expert in this field feel that figure is going to be 16,500, or possibly 17,000 a year by 1990.

Of this class of 15,000, approximately 20 percent are expected to be women. This is a major revolution in terms of medical education. The first-year class entering this fall is 20 percent women.

We know that women are going to produce and choose different careers from men, and possibly there will be a much better balance of career choices. The British experience is very interesting there. They have had a lot of women in medicine for about 50 years, and they have much more concentrated on primary care, family care, than on the highly referred specialties which require long training.

As I mentioned in item No. 5, it is for this reason that it would seem to be most unwise, at this particular time to introduce rigid Federal legislation involving fiscal incentives or disincentives, or a system of enforced service.

We are in an entirely new ball game, and I think it would be a mistake to try to freeze it.

The sixth point Dr. Zuidema has already referred to, foreign medical graduates.

It is interesting that about 12 percent of them currently are U.S. citizens, as your committee is well aware. I feel that the others, the foreign-born FMG group, should be limited to, if possible, about 1,500 a year.

That, with the U.S. medical class, is going to give you 16,500 to 18,000 new young people entering medicine every year, which is going

to increase the total number of doctors active in this country from 143 per 100,000 population to about 175 to 180 per 100,000 in 1990. So it is a very impressive change and a remarkably changing scene just now.

As to the distribution of surgeons by geography, Dr. Zuidema has already alluded to the work of our committee, and I will not repeat that. Surgeons are remarkably well distributed largely according to hospital beds distribution, but it is notable again, as I believe he mentioned, that the south-central and southeastern portion of the United States has a lower ratio of surgeon specialists, total physicians and primary care physicians, as well as a lower ratio of hospital beds.

So that there is a geographical problem, as we see it in the south. But in the other large areas of the country the differences in ratio are not great.

Finally, as to distribution by specialty, it is our feeling that the surgical needs of this country can be met by a ratio of surgeons of 24 to 25 per 100,000 with their trainees, residents working with them, that is, about 10,000 trainees. This would total about 64,000 (surgeons-plus-trainees) now.

We entirely agree with what Dr. Zuidema has said, that we should constrain surgical residency programs downward to the region of about 1,800 to 2,000 per year so that, by 1990 to 2010 (the two decades we have looked at in particular detail) the number of surgeons is reasonably constant, is comparable with those in Western Europe, Canada, Australia, New Zealand. It must be a group of Board Certified Surgeons, all of whom have passed stiff examinations.

In connection with that, it is very interesting, as point No. 15 emphasizes, that while we can talk with great ease about reducing surgical training programs—and I do believe that will be done—there are neighboring problems where recruitment has to be increased, and this is really going to be tough.

Because some of the finest programs in radiology, pathology, anesthesiology and rehabilitation medicine are being very poorly sought out by U.S.A. graduates, and at the present time some of those programs have very few U.S. medical graduates in them, I think we should not lose sight of the need for increased recruitment in that area.

As to the problem of who is going to make this all work, I again feel it would be best to do it in the voluntary sector. I am afraid I do not share your view that the voluntary sector has been such a failure.

The Joint Commission, the American Board system, the entire system of postgraduate education, many of the recruitment efforts and many of the efforts to increase quality and distribution of care, have come about through the voluntary sector of medicine, and I do not believe that we should throw that overboard.

Senator KENNEDY. You are not suggesting that the imbalance in terms of maldistribution just as medical personnel generally in the country has not gotten worse in the period of 10 years, are you?

Dr. MOORE. As far as surgery is concerned?

Senator KENNEDY. No.

Let us take the general case.

Dr. MOORE. On the general side, as I say, in the South and South-eastern part of the country, there is a relative lack of medical facilities of all types.



Senator KENNEDY. Do you think that counties in which there is a lack of medical personnel has been increasing or decreasing?

Dr. MOORE. I think it has been increasing.

Senator KENNEDY. In both areas where there are facilities as well as—

Dr. MOORE. That is correct, because hospitals have been built in other counties. The facilities are not always immediately adjacent.

Looking at the county-by-county distribution which is shown in these tables which we have made, one can see that there are counties, often thinly populated, where there are not major medical facilities.

What I am trying to say is that with the change in the class size, with the change in the nature of the young people going into medicine, and with the huge increase of physicians that is imminent in this country, I would hesitate to say how you can draw Federal legislation that is going to affect that favorably.

Senator KENNEDY. You are just going to say because there is an increased number, and there are more women in the classes, that these problems can resolve themselves?

Dr. MOORE. I will say that they are going to be resolving, that the trend is very strong toward it. Many more of the medical graduates at the present time are choosing primary care careers. The constraint on surgical residency is going to be real.

As I said a moment ago, the thing that worries me is the inability to get people to go into some of the other fields of medicine that are so much needed.

I think primary care is going to do very well, and some of those underpopulated counties that your assistant is showing you are very close to large medical centers and, in other cases, of course, what they need is small well-knit group practices.

You cannot expect a young man or a young woman, freshly graduated from medical school, to go alone into a small place and start practice. They need to work together with other people, and they have to have a hospital base, and then some people can help them in radiology and anesthesiology.

In other words, there is a medical mix which is ideal for medical care.

Senator KENNEDY. Doctor, we understand that, but the problem is we have been attempting to deal with that with a variety of different ways by health legislation. That is why we have been developing the HMO legislation for example, and trying to improve on the various area health education centers, but you cannot discount the importance of this particular ingredient as well.

I am not leveling this at you necessarily, but the various groups come up and say, "It is the other person's fault."

If you take the numbers of family physicians and practitioners by State, which are the AMA figures over the period, up to 1972 figures, and look at the reduction by State, it is absolutely dramatic.

Dr. MOORE. Yet, you know that particular table has a problem, in that internists in this country, which are quite numerous, estimate that about 70 percent of their number do family practice medicine, and yet they are not registered in the AMA tables as doing general practice.

I do not mean to say that there are enough primary care physicians. I have said the number should be increased.

What I am trying to say is that with a new flood of many more American medical graduates, with a large group of women in that group, I think it is important to look and see what is going to happen rather than trying to force those young people into specific locations or specific fields.

Senator KENNEDY. Who is suffering?

If we open up residencies in those particular areas?

Dr. MOORE. You ask me a funny question. I did not say anyone was suffering. I say we want to open up residencies in those areas.

Senator KENNEDY. Who is being disadvantaged if we open up residencies in areas which are underserved?

Dr. MOORE. Are you using the word "areas" to mean geographic areas?

Senator KENNEDY. You can talk about residencies. Let us take the area of residencies.

Dr. MOORE. You mean geographical areas or specialty areas? I do not know which you mean.

Senator KENNEDY. Let us take the specialties.

Dr. MOORE. Let us deal with them both.

In the specialty areas, I think that the residencies should be and must be and are being opened up, especially in general practice and family practice.

Senator KENNEDY. If you would get back to my question, who is being disadvantaged by the fact that the movement in various residencies is more into primary care?

Dr. MOORE. Nobody is being disadvantaged. I think it is excellent.

Senator KENNEDY. Who would be?

If no one is, then why not expand those?

Dr. MOORE. I think they should be expanded and will be and are, but I do not think we need Federal legislation to do it.

Senator KENNEDY. How are you going to do it?

Dr. MOORE. In the first place, you have so many more young people going into medicine than you did only a few years ago. I do believe you are going to find many more women in this field than in the past, and you have many more new general practice and family practice residencies opening up.

Senator KENNEDY. Could you tell us what your empirical evidence is that women are going to do that?

I daresay, unless you have some empirical data, it is a rather sexist remark.

Dr. MOORE. I do not mean it in a sexist way.

Senator KENNEDY. Why do you think women would not want the same kinds of opportunities, would they not want to take challenging opportunities in all the various specialties and all the other kinds of areas that men have been in, and why compare it in the past with Great Britain where you had control of residencies?

I think this is quite unconvincing.

Dr. MOORE. May I speak to that?

Senator KENNEDY. You may when I am finished.

If you can point out to me on the basis of your empirical evidence that women are prepared to go into these rather than the other areas, that would be my question.

Dr. MOORE. Let me respond to that.



In the first place, it is not a sexist remark. We know that women in the medical schools want different types of training programs. They want to have opportunities to do family things, raise their children, and the highly referred specialty training programs are generally not attractive to them.

As I have said in this paper here, American women already are showing a tendency to go into surgery and the other highly referred fields more than British women have, yet there seems to be every reason, in talking to women medical students as I have on many occasions, in talking to residents, to believe that they will choose a different mix from that chosen by men in the past.

That is perfectly normal and natural, and the opportunities are going to be open to them again, as I say in this paper, that every field of American medicine wants to attract young women into it.

The women, however, are going to choose what they wish to do. This makes it a very bad time to introduce restrictive Federal legislation, because you have a bigger class, you have a different makeup of the class, and it is hard to know what they want to do. And I do believe that what they wish to do is a very important criterion in the product of medical care.

Senator KENNEDY. What about the medical people up in my cities?

Since they happen to be paying for this, do they not have some rights as well?

Dr. MOORE. Of course, they do. No question about it.

Senator KENNEDY. That is what we are attempting to balance.

Dr. MOORE. That is right. No question.

Senator KENNEDY. What you are prepared to do is rather than give us at least some kind of suggestion or recommendation, you are prepared to say because we have more women, the way I understand it—if I am wrong, correct me.

Dr. MOORE. What I am saying is with much great numbers and different makeup of class, it makes it a difficult time to design new legislation, whereas we could say, "let us see how this class is going to work, let us see where they are going to go, what they are going to do."

I do believe that the CCME and the other agencies, who I believe we will hear from today through Dr. Holden, are prepared to assist in reduction of surgical residencies, which should be done.

So that I do not think that it is just the fact that there are a lot more women in medicine. I think that is a tremendously healthy development in American medicine, but I do think it is going to change the picture of medicine as we know it in this country, and there is going to be a change in the direction of better family care and better primary care.

Senator KENNEDY. What is the problem? What is really the difficulty?

You have more women and more numbers? Why does that make it more of a problem to allocate on the basis of what the needs are of the country?

If I may finish.

Dr. MOORE. Yes.

Senator KENNEDY. From the people who, by training and experience and responsibility, have an understanding, an awareness, about what the needs are in the Nation.

Why is that so challenging?

Dr. MOORE. It is challenging to introduce new legislation that limits what people do, tells them where to go and what to study, just at a time when that situation is changing suddenly and massively.

By 1990, there are going to be something like 170 to 180 physicians per 100,000 in this country. It is going to be the biggest increase that we have had, and I believe that it is going to solve some problems, and it is going to create some new problems that none of us can foresee at the present time.

Senator KENNEDY. If they are going in there, I do not see how you can have it both ways. I do not think you can say on the one hand, because you have more women and more young people, this is going to resolve the problem, and then, on the other hand, say why can we not work out some kind of process or procedure—we know we do not have that particular expertise, but we ought to be able to work out some kind of procedure—to make sure that this is what is going to happen.

If they are going to go to those places, and they are because of the reasons you have just stated, I do not see why it is so complex.

Dr. MOORE. I do not think it is complex enough to require new legislation.

I hope you do not believe that I am saying all these underserved places are going to be served immediately. Of course not. But the trend toward a healthier balance between primary care and specialty services in this country is coming, it is on the way. A larger number of physicians with a different distribution within that group of physicians is bound to change the situation, and I am enough of an optimist to believe that it is going to change within the direction that you have very wisely called the attention of this country to, the need which is more primary care, more people in smaller places.

Senator KENNEDY. Do you agree with the administration's position that in 3 years, 50 percent of all the medical school residencies must be in primary care?

Dr. MOORE. What administration's position?

Senator KENNEDY. That is the administration of HEW.

Dr. MOORE. I am not aware of that position.

Senator KENNEDY. Do you agree or not agree?

Dr. MOORE. That 50 percent of all residents be in primary care?

Senator KENNEDY. Yes.

Dr. MOORE. If I may respond to that indirectly, I am not aware of that proposal, but we have been aware of the proposal that the total number of first year residencies in this country should be limited to 125 percent of the U.S. graduate class.

We have looked at that in detail with respect to primary care and all of the specialties, and the projections that we have made call for almost half of those opening slots being in primary care, which includes internal medicine, pediatrics, general practice, family practice, and some aspects of obstetrics.

Senator KENNEDY. Do I gather your answer to be then that you support the administration's proposal—I would be glad to give you a copy of their testimony—that half of the residencies within a 3-year period are to be performing primary care functions?

Dr. MOORE. Half the residencies performing private care functions?

You have a different package there because a residency in primary care may not necessarily be in a small community, and I do not think that we can say that residents in primary care are necessarily going



to give primary care to large segments of the population until they have finished their residencies.

Senator KENNEDY. Yes, it is.

Dr. MOORE. There is no way that you can have it both ways.

Senator KENNEDY. What about you, Dr. Zuidema?

Dr. ZUIDEMA. I think there is no question that there is an increased interest in primary care in all the graduating classes today, and last year I believe you will find there were more applicants for primary care training positions than there were good positions available.

I think that it is essential that we develop more primary care residency programs to attract these graduates, and that they be good programs so that they are not turned off by their experience.

I think the more difficult problem is getting primary care manpower into underserved areas and making them professionally satisfying to practice there.

There is a high dropout rate among general practitioners after a period of time, and I think that this particular problem will not be addressed by HMO legislation, but would require some special attention to what incentives might be necessary to make them an important component of the practicing medical group.

Senator KENNEDY. Do you agree that the estimates the administration put forward that in 3 years, 50 percent of all medical school residencies must be in primary care are sound?

Dr. ZUIDEMA. I think if that includes the primary care components of internal medicine and obstetrics, gynecology and pediatrics, it might be a little high.

If it is primary care exclusive of those disciplines I would think it would be excessively high. I have not had an opportunity to study the subject.

Senator KENNEDY. All medical schools will be asked to establish administrative training units in family practice and primary care and have a high proportion—eventually 50 percent—of their affiliated residencies in primary care.

These conditions were included: The recognition of the importance of medical school environment and specialty choice.

Dr. ZUIDEMA. Are they including pediatrics and internal medicine?

Senator KENNEDY. It is unclear.

Dr. MOORE. Also you have a peculiar problem there.

If you go to the 125-percent residency proposal, which seems to be a very reasonable one, you will have about 18,000 plus or minus, residency slots, and if 9,000 of them are in primary care, it will be a huge increase.

Yet the point I was trying to make a moment ago is that those 9,000 young men and women in that first year will make only a small dent in primary care of the country.

It is going to take a long time, and that is why we have made projections through the periods of 1990 to 2010, to see what the implications are of that sort of residency program.

Senator KENNEDY. I understand this is the official action of the House of Delegates of the AMA: Adopt a proposal that at least 50 percent of all medical school graduates be in family practice residency programs in coming years.

You have the willingness of the administration to support this position, and then you have the AMA House of Delegates, but I suppose

your testimony is that is a bit high as far as what you believe to be realistic?

Dr. MOORE. In answer to your question about specific numbers, at the present time, as nearly as we can determine—again the defining of primary care to include a large practice of internal medicine—67 per 100,000 involved, and by 1990, with this 125 percent residency program, it would have gone up to 92 per 100,000, or about a 50-percent increase.

So that is a sizable increase. The increase in absolute numbers, of course, is much more impressive because the absolute numbers of the population are going up, and it would be an increase of almost 100,000 general practitioners in the country.

Senator KENNEDY. What do you in your program estimate the number of residencies to be who will be in primary care?

Dr. MOORE. Again, if you go the 125-percent concept—I think it is a very wise concept since it does limit the FMG immigration to a healthy figure, but if you go with that, you are going to find that you have about 8,000 or 9,000 primary care residencies.

Now, that includes internal medicine, pediatrics, and so on. I think it will produce a large increase in the number of people who are giving access care in this country.

Senator KENNEDY. Do you think that we have too many surgeons in the country now?

Dr. MOORE. I would definitely agree with what Dr. Zuidema said. We have too many people doing surgery. We do not seem to have too many board certified surgeons. In fact, the number is about comparable with the other English-speaking countries.

The trouble is, we have had a very free and liberal system in this country, and just about anybody who felt that he was in a hospital and licensed and wished to do surgery, might undertake operations. I do not think it has been wise.

It has been part of our history.

You remember Dr. Hertzler and the “horse and buggy days,” when any G.P. did major surgery. I think we have reached a point where we should seek credentially not only in surgery but in radiotherapy, psychiatry, and in some medical specialties—cardiology—to determine who should do cardiology, et cetera.

It should be the people who have studied it and have really taken extra time in it.

So, in answer to your question, I do not think we have too many surgeons, but we have too many people doing surgery.

Senator KENNEDY. Do we have too much unnecessary surgery?

Dr. MOORE. I was afraid you would ask that question because I cannot really answer it.

I think if you have any unnecessary surgery, it is too much. How many unnecessary operations are done in this country is a tough question to answer.

Many people would feel, for example, that elective open reduction of fracture is unnecessary—that they will heal if you put them in a plaster cast—but if you are the person with the fracture and want to get back on the playing field, you might like to opt for that. So there is a difference of opinion in many of these areas.

Now, there are other areas where it seems to us that the surgical privilege has been abused, and that should be rectified.



Senator KENNEDY. You think it will be rectified by the steps you have outlined here?

Dr. MOORE. Yes.

I would like to emphasize that hospital trustees play a very large role in our thinking, because that is where hospital credentialing is going to come from, not only for surgery but for the other highly specialized fields of specialty backup to primary care.

Senator KENNEDY. Do you think it is justified to many of the people who are paying for medicaid, the kinds of enormous swings in the types of surgery of those that are receiving medicaid?

I refer now to the study that was done over in the House, by the House Committee on Interstate and Foreign Commerce in 1975, where they list the various States and talk about the surgery performed on medicaid eligibles.

They have the number of procedures, the population, the surgery rate per 100,000. They go to a State like Missouri, where you have 2,819 surgeries per 100,000; to a State like North Carolina, which has 44,887 per the same 100,000.

What does this sort of thing mean?

The rest of the statistics are almost as dramatic in terms of variation.

Dr. MOORE. I cannot answer that, sir. I would have to know more about the medicaid provisions in this area and North Carolina. Some of these data do not look correct to me. But, along the lines of your same question, there is a nonuniform distribution of all specialty services in the country which seems to be capricious.

There will be a county or an area or city where a certain rate is high and another where it is low. Whether this has to do with changes in demand, changes in financing, I am sure I do not know.

Senator KENNEDY. Let us take some of these examples.

There are 26 States that reported versus the total U.S. population. The surgery per 100,000 is 18,716 versus 7,940 for the total U.S. population, which indicates the medical population is 226 percent of the total U.S. population rate.

Tonsillectomies are just about as high or actually even higher.

We are talking about hundreds of thousands of procedures which are being done, and hundreds of millions, or I would think billions, that are being expended. This is not one little county that may have some kind of particular health problem. We are talking about hundreds of billions of dollars and thousands of procedures that are being done.

We asked whether there is too much surgery being done, as I have asked for the last 7 years, and here we do not even know whether there is, or not, or maybe there is, or we hear one is too many.

How long are we going to keep hearing that kind of response?

Dr. MOORE. I think you are probably going to keep hearing it so long as you ask the question, because it is very difficult to answer.

You could ask, are too many people being admitted to coronary care units? Any specialized service involves a difficult question of judgment.

You have just almost indicated to me a hundredfold difference in tonsillectomy rates in medicaid patients in various States, and I have no explanation for that. I do not know.

[Noted late: Some of the data given Mr. Kennedy by the House Oversight Committee report, were shown to be in error.]

[The following material was subsequently supplied for the record:]

HARVARD MEDICAL SCHOOL  
DEPARTMENT OF SURGERY

FRANCIS D. MOORE, M.D.  
*Mossley Professor of Surgery*

*Peter Bent Brigham Hospital  
721 Huntington Avenue  
Boston, Massachusetts 02115  
Telephone 617-566-6226*

November 7, 1975

The Honorable Edward M. Kennedy  
Dirkson Senate Office Building  
Washington, DC

Dear Senator Kennedy:

You will recall the Hearing on September 30, concerning some of the proposed legislation for medical manpower. In my letter to you dated October 8, I sent you some additional notes and also raised serious questions about some of the data that were revealed there for our immediate comment and justification.

As you will recall, I was both surprised and shocked at those numbers, on surgical operations in Medicaid patients. Two of them immediately stood out as being virtually impossible within the framework of surgical statistics as they exist in the United States. Since I was concerned over the possibility that someone on your staff or on the staff of Representative Moss might have taken these numbers in error, or possibly falsified them, we have checked on the matter in great detail.

It is the purpose of this letter to indicate the data as we have discovered them, and as they contrast with the numbers that were shown to you by your staff, and by you to us for comment.

The matters particularly in question were those of the incidence of hysterectomy in Nevada in Medicaid patients and tonsillectomy in Maine Medicaid patients.

Nevada-Hysterectomies

We have checked these data against those supplied by the administrator of the Medicaid Title XIX Program in Nevada. We have also checked them through other professional sources in Nevada. The figures shown by your staff were erroneous.



Senator Kennedy

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November 7, 1975

Data Displayed at Kennedy Manpower Hearing, September 30

The data shown were from a document entitled "Preliminary Report of the Results of a Questionnaire Sent to State Medicaid Agencies Concerning Surgical Costs and Fees". This is identified as having been "prepared by the Staff of Oversight and Investigations Subcommittee; Committee on Interstate and Foreign Commerce." The data showed Nevada as having a population at risk of 21,300 persons, and having hysterectomy rate of 2488 per 100,000 population. Such data are usually expressed "per 1000 population". Thus, in more conventional terms this would give a hysterectomy rate of 24.88 per 1000. The national average is indicated in the document is about 3.03 per 1000.

Actual Facts on Hysterectomy as Determined in Nevada

In 1974 there were 240 hysterectomies carried out on Medicaid patients. The population at risk is 22,300 (essentially that reported above). This yields a hysterectomy rate of 10.75 per 1000 population per year. This is less than one-half of the figure displayed at the hearing September 30 and presented in the document by the Committee on Oversight. The national average from the National Surgical Study (SOSSUS) is 2.5, a figure comparable with the national average displayed at the hearing of 3.03.

How could this error have arisen? May I quote from a recent letter from Dr. Robert W. Clark in Las Vegas.

"In discussing the whole situation with Mr. Minor Kelso, the administrator of the Title XIX Program in Nevada, he told me that some previous figures were released by his department were erroneous. The figures given at that time reflected the number of times a specific code was used in figuring a bill. As you know, the same code number for procedures is used by the surgeon, assistant surgeon, and the anesthesiologist. This could be the source of the ten-fold increase and of the numbers reported."

I was told that this document was prepared by a Mr. Siegal of Representative Moss' staff. I had an opportunity to discuss this with him personally on October 28 in Washington. I told him that I believed the error was due to the inquiry for the number of "hysterectomy billings". This led to this remarkably inflated figure. I told him at that time I believed it was not acceptable to the public to present carelessly gathered numbers as being factual and that anyone at all interested in medical care or health care delivery could readily see that a hysterectomy figure almost ten times the national average was obviously in error. There are simply not enough surgeons or enough women in Nevada to carry out such a high hysterectomy rate!

Senator Kennedy

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November 7, 1975

Tonsillectomy in Maine

We have checked these data against the Medicaid figures for the State of Maine.

Data Displayed at Kennedy Manpower Hearing, September 30

Data displayed from the above mentioned document indicated that population at risk as being 75,000 and the tonsillectomy rate as being 13.24 per 1000 per year. The national average was shown as being 5.99.

Actual Facts on Tonsillectomy as Determined in Maine

With the assistance of the physicians in Maine as well as the State of Maine Medicaid administration office we find that the population at risk is 122,000. The figure of 75,000 shown on Page 2 of the above mentioned document is actually a figure only for the number of Medicaid patients who sought medical assistance. That is obviously an erroneous basis on which to indicate the incidence of any medical care episode.

There were 933 tonsillectomies carried out in the year 1974. This would yield a rate of 8.13 per 1000 population per year. The national average from the SOSSUS study is close to that reported in the document, namely 5.2 per 1000.

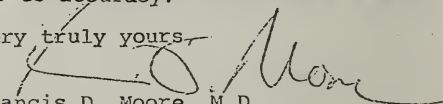
Again we conclude that an erroneous figure, inflated to almost twice the actual facts, has been inserted in the document with the obvious effect of impressing both the public and the media with careless or fraudulent surgical claims and carrying out of surgical operations motivated by the self-interest of the surgeon.

It is perfectly evident that in the case of the incidence of hysterectomy in Nevada Medicaid patients and tonsillectomy in Maine Medicaid patients, the figures that you displayed for Dr. Zuidema and myself to comment upon, were grossly in error.

May I again call your attention to the fact that in the SOSSUS Report itself there are important data on the non-uniform distribution of surgical care which lend strength to your basic conclusion that medical care distribution is not evenly provided throughout the country. This point is an important one. To use erroneous data to demonstrate this non-uniform distribution, or to imply that it results from fraudulent practices of the medical profession, is really unnecessary.

With all best wishes to you and with the hope that we will have an opportunity to see some of your other data in the future and likewise to review them with your staff as to accuracy.

Very truly yours,

  
Francis D. Moore, M.D.

FDM/jmm

cc Dr. Zuidema  
Dr. Goldman

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## United States Senate

COMMITTEE ON  
 LABOR AND PUBLIC WELFARE  
 WASHINGTON, D.C. 20510

January 29, 1976

RECEIVED

FEB 2 1976

FRANCIS D. MOORE, M.D.

Dr. Francis D. Moore  
 Moseley Professor of Surgery  
 Peter Bent Brigham Hospital  
 721 Huntington Avenue  
 Boston, Massachusetts 02115

Dear Dr. Moore:

We have been in touch with Mr. Elliot Segal, the Special Assistant to the Chairman of the Subcommittee on Oversight Investigation of the Committee on Interstate and Foreign Commerce of the House of Representatives, concerning your inquiry about the surgical rates cited by Senator Kennedy at the hearings on September 30, 1975.

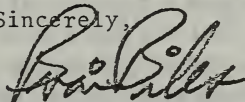
Mr. Segal informs us that the information provided him by the States of Nevada and Maine was in fact in error. The true incidence of surgical procedures in these two states is closer to the number cited in your letter of November 7, 1975.

Mr. Segal further indicates, however, that it is his judgment that no effort to falsify the data was made by anyone at the Medicaid programs in either Nevada or Maine. It is simply that the current Medicaid data system is so inadequate as to permit errors of this type when reports are developed on an ad hoc basis. The need for an improved Medicaid data system is obvious.

Senator Kennedy is certainly sorry for any difficulty caused you by this confusion. You are certainly correct in pointing out that since the material contained in the SOSSUS reports supports the point that medical services are not evenly provided throughout the country. The use of inadequate data is unnecessary.

Again, our thanks for appearing before the Subcommittee on September 30.

Sincerely,



Brian Biles, M.D.  
 Professional Staff  
 Subcommittee on Health



Dr. MOORE. In the South, tonsillectomies are much less frequently required because there are less respiratory infections there, but I am not the person to answer that question.

Senator KENNEDY. For example, there are three times the difference in Mississippi than Alabama; over 300 percent more being done in Alabama than Mississippi.

I think the point is what is being done about it other than just sort of saying, well, these things are happening.

What is being done in the profession in order to keep the heavy hand of the Federal bureaucracy out of it, because it is not going to stay out, quite frankly, if we continue to find, at least as far as I am concerned, the general kind of response, well, there are some things that happen, and we are going to get the same answer, as long as you keep asking the question, which is the way I understand your answer to me.

Dr. MOORE. I answer that by saying in the case of tonsillectomies, the people who are interested in that field—I am not expert in that field—are looking at it very closely.

I have recently heard from one of the men on that National Board that they are reducing the rate of tonsillectomies in this country, massively, because they apparently felt likewise that some of these operations were not needed.

There are other fields of surgery that also seem to give evidence of very irregular distribution, and I do believe that the people who are involved with that are looking at it, and that they have been stimulated to do so by the questions that you have been asking.

But I do not know any place in the world where you have an absolutely even distribution of all medical services over a large geographical area.

Dr. ZUIDEMA. May I address that question?

Senator KENNEDY. Just so we do not leave this question on the problem of tonsillectomies, there are other figures. We were just using the tonsillectomy as an example. But these are relevant to all surgical procedures.

I would be glad to discuss hysterectomies which showed that in some areas, both in terms of the medicaid group versus the nonmedicaid group, it is dramatically higher in the medicaid group than the national average in the nonmedicaid group, and in some areas it is close to 900 percent or more than in others.

This is true about a number of other kinds of procedures. The troubling factor is that we have been asking those within the profession who have been concerned about some of these problems, what can and must be done, and, quite frankly, we have gotten more of a response that "We are studying these, and we are really going to try to do something about it," which has been the answer I have been hearing for the last 4 or 5 years since I have been asking the question, and still we see the numbers continue.

It is not unrelated to the other kinds of more basic issues and questions which we are dealing with, which are the number of specialties and where they are needed.

What I have seen and heard since I have been chairman is everyone saying this really is not the particular problem, this kind of legisla-

tion; it is a more complex and broader problem, therefore, arguing against any kind of action.

I do not think they are unrelated to each other, and certainly I do not believe the question of the specialty maldistribution and the whole effort that we are making and intend to make in terms of the greater kinds of allocations based upon what is in the best interest of the American public from a health point of view—I think that would have an important effect on those kinds of figures, not only from a quality point of view, but also from a cost point of view.

I must say I have been disappointed that we have not really received very much from those within the College of Surgeons and the American Surgical Society to show us that they are doing very much about this problem.

That may be an unfair kind of compliment, and I will certainly permit any of these who want to speak for them to respond to it, I invite their response, but I would ask whether either of you want to make whatever comment you wish.

Dr. ZUIDEMA. I would appreciate a chance to address that question, which is basically how does the profession address itself to quality control.

I think that there are a number of things which are important here. First of all, the surgical work performed in hospitals accredited by the Joint Commission involve a whole series of quality control exercises which include tissue committees reviewing all tissue removed at operations, include medical, which is a detailed study of the adequacy of care of patients in given categories; it includes the quality assurance; includes elimination of staff privileges for surgical procedures as well as privileges for many internists and pediatricians, and all of these things are required for the continuing accreditation by the Joint Commission.

There are, however, at least 1,400 hospitals in the country which are not accredited by the Joint Commission, and therefore do not come under such regulation. I think one simple step might be to extend the accreditation requirements and make them uniform throughout the country.

We have found in our experience with the developing foundations for health care across the country that, as a statistical base is developed, which then shows up aberrations in the patterns of care, if you have an unusual number of hysterectomies or unusual number of tonsillectomies, the statistics are there to point the finger at the involved party.

Under the present circumstances, without adequate statistics and with individuals practicing in more than one hospital, it is very hard to get the figures on a geographical basis.

I think that PSRO legislation should be of help in furnishing the statistical base on which to make some judgments.

I think the American College of Surgeons had from its very beginning, in the early 1900's, a very strong interest in quality. It has contributed to the voluntary agencies which have all been based on emphasis in quality. I think we have a hard time getting proper statistical information, but we have made a beginning in that regard at least.



Senator KENNEDY. I do not question, Doctor, in that area that work is not working well. It is working superbly. We are not just looking for the bad apples in trying to say this is an indictment of the system, but if you take what we are talking about in terms of statistics here, there is a dramatic difference in figures between States that are contiguous, and we are not comparing Mississippi with Massachusetts; we are comparing Mississippi with Alabama, for example.

What we are talking about is the contrast between medicaid and non-medicaid, and you are getting dramatic shifts which have implications in terms of hundreds of thousands of procedures, hundreds of millions of dollars.

The only thing that I am mentioning here is that we are getting the expression about why we should not have these kinds of pressures put on either the profession or the hospitals or medical schools, and yet we are confronted with these kinds of results time and time again, and we just have not seen an important difference, I must say, or a kind of aroused knowledge of surgeons saying, "By God, we mean business, and we are going to come back in a year and tell you what we are going to do."

Dr. MOORE. It is very important in that regard to realize that no voluntary association of professionals can control the activities of persons who are not members of their own group. That is why the hospitals themselves, the JACH, the CCME, the other national agencies, are very important in this connection.

When you find very large differences in surgery rates in different areas, in different counties, you wonder if some surgery is being done that is not needed. You wonder also if in the other county there are some people who would be more comfortable or happy or have better hygiene with a procedure being done but for whom it is not available for some reason or another.

It is not easy always to make an interpretation of which way the facts lie. That is why it is our feeling that the whole residency program, not only in surgery but in the specialties, has to be looked at by an agency that crosses some of these boundaries.

Senator KENNEDY. The fact is, as you well know, that the CCME opposed the Rogers bill which would have given the authority to them.

Dr. MOORE. I would like to hear from them.

Senator KENNEDY. That is the problem that we have up here. You say, well, they had taken it, or if they had worked it out that could have been terribly open. They opposed it in the Rogers bill, and we are left with having to legislate it. We are having to say yes or no in effect.

Senator Stafford, did you have any question?

Senator STAFFORD. No.

Senator KENNEDY. Thank you very much.

Our second witness is William Ruhe, M.D., secretary of the Coordinating Council on Medical Education, director of the Division of Medical Education for the American Medical Association, and secretary for the AMA Council on Medical Education.

We would also like to welcome other representatives of the CCME.



Dr. RUHE. Mr. Chairman, I am Dr. Ruhe, and I am secretary of the Coordinating Council on Medical Education. Because of the precise nature and function of this organization, it has the policy of not testifying as the CCME, and because of that we have here a panel of representatives of the five parent organizations.

There will be one introductory statement on behalf of the panel, and this will be made by Dr. William Holden.

**STATEMENT OF WILLIAM D. HOLDEN, M.D., CHAIRMAN, COMMITTEE ON PHYSICIAN DISTRIBUTION, COORDINATING COUNCIL ON MEDICAL EDUCATION; TOM E. NESBITT, M.D., IMMEDIATE PAST CHAIRMAN; JOHN COOPER, M.D., PRESIDENT, ASSOCIATION OF AMERICAN MEDICAL COLLEGES; C. ROLLINS HANLON, M.D., DIRECTOR OF AMERICAN COLLEGE OF SURGEONS; DAVID THOMPSON, M.D., NEW YORK HOSPITAL; AND LEO J. GEHRIG, M.D., SENIOR VICE PRESIDENT, AMERICAN HOSPITAL ASSOCIATION, A PANEL ON THE SPECIALTY DISTRIBUTION OF PHYSICIANS**

Dr. HOLDEN. I am William Holden and represent the American Board of Medical Specialties. I am chairman of the Committee on Physician Distribution of the Coordinating Council on Medical Education, and a member of the Advisory Council on the Specialty and Geographic Distribution of Physicians to the Institute of Medicine. I am also professor and director of the Department of Surgery at Case Western Reserve University in Cleveland, Ohio.

The other members of this panel are all members of the Coordinating Council on Medical Education. Dr. Tom E. Nesbitt, a practicing urologist, is speaker of the house of delegates of the American Medical Association and immediate past chairman of the Coordinating Council. Dr. John Cooper is president of the Association of American Medical Colleges. Dr. C. Rollins Hanlon is director of the American College of Surgeons and president of the Council of Medical Specialty Societies. Dr. Leo J. Gehrig is senior vice president of the American Hospital Association. Dr. David Thompson is director of the New York Hospital and represents the American Hospital Association.

The statement that I shall read represents the combined efforts of the five panelists but does not represent official or approved policy of the Coordinating Council.

The Coordinating Council on Medical Education consists of appointees from five major medical organizations: The American Board of Medical Specialties, the American Hospital Association, the American Medical Association, the Association of American Medical Colleges, and the Council of Medical Specialties. These five national organizations and their constituent members are essentially responsible for the quality of medical education and the services provided by the greater part of the medical profession.

The Coordinating Council had its first meeting in January 1973 and at that time recognized that there was a need to study and analyze the specialty and geographic distribution of physicians. A commitment to the study was made, and the Committee on Physician Distribution was appointed.

The committee recognized that there were three main subjects to be addressed in a sequential fashion: One, the primary care physician, two, the role of the foreign medical graduate, and three, the specialty and geographic distribution of physicians.

A study of the availability, numbers and location of primary care physicians was undertaken and a report on this subject was approved by the five parent bodies of the CCME. A condensed version was published in the *Journal of the American Medical Association* in August 1975.

The report defined a primary care physician, or group of physicians as:

One who establishes a relationship with an individual or a family for which he provides continuing surveillance of their health care needs, comprehensive care for the acute and chronic disorders which he is qualified to care for, and access to the health care delivery system for those disorders requiring the services of other specialists.

The CCME recognized that if more primary care physicians were to be produced, the initial change that had to take place was in the schools of medicine where the image and the role of the primary care physician had to be sufficiently visible so that medical students would be attracted to careers in primary care. An initial target of 50 percent of graduating medical students selecting careers as primary care specialists was set. As identified in the CCME report on the primary care physician, in 1968 32.2 percent of the U.S. graduates entered primary care residencies. In 1973, the figure was 43.5 percent. While final figures are not available for 1974, there is no doubt that the percentage of U.S. medical graduates entering primary care residencies is even higher, particularly because of the rapid increase in the number of family practice residencies.

The recognition of the need for primary care physicians by organized medicine was manifested by the establishment of the American Board of Family Practice in 1969 and the development of residency programs in this specialty. In 1969 there were no residencies. As of September 29, 1975, there are 261 approved programs. As of July 1, 1975, according to the American Academy of Family Practice, there were 1,616 first-year residents; 96 percent of the first-year positions available were filled. Ninety-three of the family practice residencies are in university affiliated hospitals. Eighty-six of the 114 medical schools have established departments or administrative units of family medicine.

Recommendations in the report are also addressed to departments of medicine and pediatrics in medical schools in order to encourage them to emphasize the need for and the development of general internists and general pediatricians for primary care.

It was also emphasized in the report that the boards of internal medicine and pediatrics could influence the selection of careers in primary care if their requirements for admission to their certifying examinations were altered. The American Board of Internal Medicine has done this so that all internists will have a complete education in general internal medicine before they enter subspecialty training.

The CCME recognized that no significant policies concerning the specialty and geographic distribution of physicians for the future



could be developed without addressing the subject of foreign medical graduates. This was done and a report with 47 recommendations addressed to medical schools, hospitals, licensing agencies, accrediting bodies, voluntary medical agencies, and several sectors of the Federal Government resulted. The details of this report have recently been presented to the Senate Subcommittee on Health.

The Coordinating Council on Medical Education's Committee on Physician Distribution is now in the process of developing a report on the specialty and geographic distribution of physicians. The report will be comprehensive and will analyze the changes that have occurred in the specialty and geographic distribution of physicians over the past several decades and the factors that have influenced the changes.

It will also take into account the various patterns of delivery of health care and the distribution of primary care physicians and specialists related to the provision of comprehensive health care. The factors presently determining the distribution of physicians will also be analyzed since it is known that there are over 30 determinants affecting the specialty and geographic distribution of physicians and that many of them apply to other professions.

Recent developments that are rapidly creating new trends in the specialty distribution of physicians will be documented. Additional changes that appear desirable to improve the specialty and geographic distribution of physicians will be identified and recommendations to appropriate agencies will be made.

The whole problem of the distribution of physicians is an extremely complex one and intimately related to the delivery of medical services. Any arbitrarily imposed change in distribution that does not take into consideration the incentives of medical students and residents as well as their self-generated goals will evoke resistance and very likely lead to failure.

The medical profession and its leadership are today sensitive to social needs and will be responsive to the need for change. Change, however, in the specialty distribution of physicians will take time since years elapse before an initiated trend can be translated into the delivery of medical services. Any artificially implied force to accelerate change in this area can be seriously disruptive to evolving patterns of medical practice.

The greatest single need for change today is the development of more primary care physicians. This is already taking place at a rapid rate. It would be difficult to predict what the total number of specialists should be in 10 years without taking into account the problem of delivery of medical services or the rapid technical and scientific improvements in the diagnosis and treatment of disease. For example, given the rapid advances in cardiac surgery, it would be hazardous to say that even 5 years hence the residency programs in thoracic surgery should be turning out 100 or 500 surgeons a year. It is recognized that at least for the immediate future, too many of some types of specialists are being educated.

The coordinating council recognizes the complexity of the problem and the need for a resolution. The recommendations in the report being developed will address the questions at issue and will provide specific guidelines for the implementation of processes for their resolution.

Senator KENNEDY. Thank you very much. It is useful to have these new and additional statistics that you have and the number of primary care residents.

Under the House bill, they of course gave power to the CCME to have authority to limit residencies, and also to have a larger number of primary care physicians.

Why would it not be wise to do that at the present time, in any event, to permit the private sector, obviously the ones that do have the knowledge and understanding, to have the ability to build in the kind of flexibility to deal with this latter example you mentioned, thoracic surgery, to give the private sector the ability to make decisions on that?

Why is it not wise for us to give that authority to the CCME?

Dr. HOLDEN. I think, Senator, that you may get a different answer from different people, but I do believe that the great need is an expansion of primary care residencies.

What Dr. Zuidema and Dr. Moore had to say—I think practically all of us agree—is that there are too many surgical residencies at the present time. I think within the private sector all of these things are taking place today.

Residency programs that are borderline in quality are being disapproved. There is a rapid expansion of primary care residencies and family practice. The university hospitals around the country are beginning to place much more emphasis upon the education of the general physician rather than upon the nine medical specialty areas.

I think from my point of view, within the private sector there is such sensitivity about this subject now in this organization, the CCME, which is only a few months over 2-years-old. It can create guidelines and policy if necessary, to establish an environment within the whole medical community of this country that will achieve the objectives that you and we are addressing.

Senator KENNEDY. Do you think it can be done just with guidelines without giving authority?

Dr. HOLDEN. There is a great deal of authority in the policies created by the CCME because this represents policy of the five parent bodies that relate to the whole certification process, the approving of teaching hospitals, and the recognition of medical schools.

This is where authority presides in the private sector.

Senator KENNEDY. But of course it is subject to a veto from any one of the five.

Dr. HOLDEN. It is. This organization, bringing these five parent bodies together, which was done quite voluntarily in order to establish national policies then can be agreed on by the five parent bodies, has made considerable progress in just 2 years.

It has developed a primary care report, it has approved the foreign medical graduate report. It is in the process now of looking at many other subjects that are of national import to medical education.

It also is an agency that oversees the totality of medical education. It is not only graduate education and undergraduate education.

Senator KENNEDY. Dr. Nesbitt.

Dr. NESBITT. Do you want me to address the same question?

Senator KENNEDY. Yes; and the others might be thinking about it too.



Dr. NESBITT. I think it was recognized that, first of all, any organization composed as the coordinating council is, is bound to have difference of opinion and difference of approach among these five major organizations.

As to what is in the best interest of the people of this country, our basic concept is how to best approach this. Do we need statutory legislation to put something such as this in place when from all the materials and statistics that we can gather the trends are just beginning to emerge that tell us that even though our total objectives are the same, that these objectives are around the corner, that we are beginning to reach them.

Insofar as the lag time of the students is concerned, it takes a while for these 11,000 students that we are just beginning to graduate to complete their programs, to begin to enter into their actual practice of medicine. It takes an additional 2 to 5 years.

We have seen other factors of the economy, we have seen the impact of professional liability insurance. All of these factors come into play and will influence the decisionmaking that the students are faced with as they decide what they want to do and where they want to practice.

We have recent data, 1974 data, which we think will be forthcoming in a few weeks that does give us indication that there are increasing numbers of physicians entering primary care.

In some of our rural States—States with a high rural population such as Iowa, for instance—there has been an increase of numbers of family practitioners in the year 1973, and 29 of the 50 counties in Michigan, for instance, have seen an increase in the number of primary care physicians.

In my own State of Tennessee, even though the statistics reflected 1972 and do not apply to today's situation, I have seen in our area, at least the areas that I am familiar with, that we are beginning to see more physicians entering the rural areas.

We are seeing less and hearing less demands and requests for physicians in the small communities.

All of these trends I think give us the indication that we are getting to the point we had hoped to reach several years ago when we realized that the necessity was for the production of more physicians in primary care.

The Coordinating Council, as Dr. Holden indicated, is less than 3 years old. It was 5 years in its birth. It has had many problems of jurisdiction and decisionmaking as to what areas it should address, and we are just now beginning to see the functioning organization that is addressing the totality of medical education in the attempt to assure quality and access problems through the accrediting process as relates to our medical students, our residency programs, programs of continuing medical education and allied health groups.

To burden that particular body with a function such as was envisioned in the House legislation relating to the subject would have virtually destroyed the original intent and purpose for which the coordinating council was created.

We do not think that the legislation is necessary in view of the trends that are occurring, and it is my personal feeling it would be inappropriate for the coordinating council to undertake that particular task at this point in time.

In effect it is unnecessary, and through the voluntary activities of the coordinating council, these objectives which we all have, will be reached if we give it sufficient time.

Senator KENNEDY. What happens if a hospital does not follow the guidelines with reference to the residency program?

Dr. NESBITT. The residency review committee—Senator, I am not certain I am the one to answer that.

Senator KENNEDY. Dr. Holden or any of the panel may answer.

Dr. HOLDEN. If these guidelines represent national policy with respect to the accreditation mechanism and a program of graduate education does not come up to the criteria, it becomes disapproved formally.

Senator KENNEDY. How many, for example, have you disapproved last year?

Dr. HOLDEN. I think Dr. Ruhe can give you the number.

Dr. RUHE. It would take me a minute to look it up.

Senator KENNEDY. While Dr. Ruhe is looking for that figure, Dr. Holden, who does the oversight to insure the standards or guidelines are being met?

Dr. HOLDEN. It is done in the graduate arena through the residency review committees and staff of the American Medical Association in the department of medical education.

They actually perform on-site visits to the programs, collect a voluminous amount of information prior to the visit, and spend a great deal of time in the particular program talking to not only directors, but staff, hospital administration, residents, and students as well.

They then write a report that goes to the residency review committee where it is thoroughly discussed in terms of its comparability to other quality programs. They make a recommendation to the Liaison Committee on Graduate Medical Education which is the formal and official accrediting body. The policies of the Liaison Committee on Graduate Medical Education in terms of the accreditation mechanism are approved by the Coordinating Council on Medical Education.

Senator KENNEDY. So if you set out these guidelines in terms of the types of residency programs, then they evaluate them in terms of quality and whether they are following the guidelines established by CCME. Is that right?

Dr. RUHE. I have the figures that you requested.

During the 1973-74 year, the last figures that I have at hand, there were 2,508 residency programs reviewed during the year. Of those to be discontinued, there were 107 on which approval was withheld. These were applications for careers.

There were 155 existing programs in which approval was withdrawn, and there were 178 programs placed on probation or continued on probation.

Then there was a larger number for which progress reports were required, 322; programs in which further data was required, 256; and so on.

We will be glad to make this available to your committee. We tabulate these statistics annually.

Senator KENNEDY. How many residency programs are there that are actually reviewed?



Dr. RUHE. Roughly about 4,600 residency programs in the country today, and 2,500 reviewed last year.

Senator KENNEDY. Of the ones that were withheld, were any restored?

Dr. RUHE. Yes. Occasionally when a program loses its approval, it may then reapply for the reinstatement, provided it satisfies the deficiencies that have been determined.

Senator KENNEDY. Can you give us the primary reasons for the withholding?

Dr. RUHE. The programs are always disapproved because they fail to meet the essentials for their particular field and these involve a variety of things.

They may involve the resources of the institution, the amount of patient care provided, the variety, and nature of patient care.

Senator KENNEDY. What I was trying to get at, Doctor, is whether any of these were disapproved because the residency program was not following the CCME recommendation in terms of primary care.

Did that happen at all?

Dr. RUHE. The CCME has not addressed problems of that nature. The CCME does not act on individual institutions or the individual program in terms of its general recommendation.

Senator KENNEDY. As I understand then, you do not establish any guidelines as to the number of surgeons. You just make sure whoever is being trained in surgery is getting a good education.

Dr. RUHE. That is correct. The residency review committees determine whether the programs meet requirements in all of the surgical areas. This includes an identification of a number of trainees in that program because this must be related to the size of the faculty, that kind of thing.

So in that respect the residency review committees do exercise a limitation on the numbers of trainees, but this is not done in reference to other than the standards for education in those programs.

Senator KENNEDY. Dr. Cooper.

Dr. COOPER. The position of the AAMC is spelled out in S. 992 which you and your colleagues have generously introduced at our request. We have called for the CCME or a commission made up of CCME nominees to advise the Secretary on the number and distribution of specialty training programs.

That position was being considered by the executive council in the middle of September and we affirmed it.

Senator KENNEDY. What is your reaction, Dr. Cooper, if the CCME does not want the authority or the power? Is it wise to give it to them anyway, instead of doing it in some other way?

Dr. COOPER. I think, as I said, S. 992 calls for an alternative which would be for the Secretary to appoint a committee made up of nominees of the parent organizations of the CCME, plus public members. If one or more of the organizations does not wish to nominate a member, then the Secretary would make his appointments from people from that group.

Senator KENNEDY. Dr. Weber, of the University of California, appeared before the subcommittee in May of 1974 and made this kind of comment, and I would be interested in your reaction to this, Dr. Thompson.

That the hospital administration focus on the need for survey in the hospitals and whether there is a financial factor involved with the residency programs. Where interns and residents provide much of the medical care, the overriding factor is the need to provide service but is subject to general financial restraints which are often dictated by the hospitals.

Furthermore, the chairmen of the departments of medical schools frequently place pressure on hospital administration to get an expansion of their academic program. This is based on a desire of the status associated with large programs and the need to gain additional moneys to expand their service.

Do you have any reaction to those comments?

Dr. THOMPSON. I have no doubt that the residents provide a great deal of service and the heads of the departments who actually have the responsibility for that service actually come to the administrator and say: I need  $x$  number of residents to carry out this task.

It has not been my experience that these requests have been out of line with the service requirements as well as what they really can provide in the way of education.

I am not saying this may not happen in some institutions, but in my experience there has been a good relationship between the requests and what the need is and what can be provided. Maybe I am just fortunate. That is my experience.

In regard to the initial question, the American Hospital Association position has been and remains that the matter of control of the types and numbers of specialties and training should remain in the voluntary sector. I think it is also fair to say that the American Hospital Association, along with the other representatives of the five parent organizations, do believe that the coordinating council, in developing a report and guidelines with regard to the specialty distribution matter, that this will have a considerable impact on medicine and the training of individuals.

Rather than to perhaps put it in terms of whether that is authority, I think there is a good deal of influence because you have here all of your organizations that are concerned with this and I believe it is fair to say—at least it is my impression—that a set of guidelines coming out from CCME will have considerable influence on what happens.

The fact of the matter is that with or without the CCME, although I believe it has added its influence, the trend in terms of primary care physicians is clearly here, and it is improving, and I think the target of 50 percent would be met and relatively quickly.

In the same fashion, I believe that the guidelines that come out of this organization in regard to specialty distribution will likewise have considerable influence. I think that the powers of persuasion are considerable, Senator.

Senator KENNEDY. Dr. Gehrig.

Dr. GEHRIG. Thank you, Senator.

I believe that Dr. Thompson has expressed our point of view very well.

Senator KENNEDY. Dr. Hanlon.

Dr. HANLON. Senator, with regard to the position of the Council of Medical Specialty Societies, in testifying before the house we em-



phasized that we did not think that the legislation was necessary, and I would reiterate that position.

On the other hand, we did give figures that if some degree of restriction were to be imposed from whatever source, it should take into account the realities of the situation with regard to residency positions as they now exist, so that the phasing in of any kind of restriction—and this has been adverted to by Dr. Moore and others in their discussion thus far—would have to be done in a phase-in fashion.

We do not believe that the legislation is required or desirable at this time. Of course we would not be in favor of its being given to the coordinating council for the reasons which Dr. Nesbit has expressed, namely, it is not the function of the coordinating council to address this kind of task on an on-going regulatory basis.

I think it is worthwhile to say another thing about the so-called veto power. The purpose of the coordinating council was not to achieve absolute uniformity of viewpoint, but rather to discuss the complex issues such as this, so that whatever degree of agreement could be achieved would be thrashed out in that forum.

I do not believe it is a deficit of the CCME that everyone does not come to precisely the same viewpoint on all aspects of the subject. I think that the question of the veto power by one organization has a somewhat pejorative connotation which I think is inappropriate.

Mr. Alex McMahon has suggested that in the CCME we should achieve a maximal achievable uniformity, and that one cannot expect it to be 100 percent.

I was invited earlier, I presume as director of the American College of Surgeons, to comment on why the college has not set down regulations for all surgeons—I believe I understood your question correctly—and said: “We are going to tell you what to do.”

That is not done because the college is a voluntary organization, and its control is over the 30,000 members in this country who are its fellows. It can exert that control to the maximal degree by removing the certificate of fellowship from a fellow, but we have no control beyond that point.

An individual who is dropped from the college for whatever reason—bad performance or any kind of turpitude, inconsistent with the purposes or objectives of the college—unless his license is removed by the State, he may continue to practice; so that our authority is restricted.

I do not mean to be apologetic about that. It is a simple fact of life. In addition to which, if we attempt to remove the certificate of the fellow, it sometimes requires a long legal battle. The case of a surgeon in your own States which went to the highest Illinois court, did constitute a landmark case in which our disapproval of his activities did require that he give up his certificate. He is still practicing, but not in those hospitals where his privileges have been lifted by local hospital restriction.

Senator KENNEDY. Do you want the power to be given to the American College of Surgeons?

Dr. HANLON. No. I believe the College of Surgeons, speaking for myself, in its central judiciary committee, has a vast job in policing the fortunately small number of miscreants among those 30,000 individuals in its ranks.

However, to extend the power of the American College of Surgeons to those who by our standards are not trained surgeons but are simply carrying out operations, would be unfeasible and I think it inappropriate.

Senator KENNEDY. So we still have them practicing.

Dr. HANLON. That is, as mentioned by Dr. Moore, because of our liberal tradition and because the certificate which one receives on graduation from medical school, technically empowers one in many States to carry on the practice of medicine and surgery. Though it is customary, of course not to carry out surgical procedures unless you have some hospital experience a person could technically carry out procedures which would be legal, without the kind of training which is requisite in some areas.

Senator KENNEDY. This is where liberals and conservatives may get turned around because the view is once they are able to get their license, they are able to go out there and practice and be able to perform various kinds of surgery, and the public ends up both picking up the costs for it; as well as the implications of the question of the quality of service. That is, I am sure, not what we call part of the liberal tradition.

Dr. HANLON. I wonder if I might comment on those statistics about the variation in medicare and nonmedicare which you quoted earlier.

Senator KENNEDY. Yes. You may comment now but you may supply in writing whatever you wish.

[The following information was subsequently supplied for the record by Dr. Hanlon:]

#### ADDITIONAL INFORMATION RE DATA ON UNNECESSARY OR OVERUTILIZATION OF SURGERY

I would like to provide the subcommittee with the following additional information bearing on my comments concerning validation of data used in the establishment of "factual" documentation of conditions related to allegations of "unnecessary" or overutilization of surgery.

Inconsistent definitions and variation in time frames limit any meaningful quantitative analysis. Variations in time frames over which data are collected can bias the study because rendering of surgical care is not a static process from month to month. The authors of the study, "Preliminary Report of the Results of a Questionnaire Sent to State Medicaid Agencies Concerning Surgical Costs and Fees" point out that calendar and fiscal year data were combined, that definitions of surgical procedures vary, that medicaid eligibles include active or both active and inactive, and that total procedures may be monthly averages or a yearly total.

The validity of statistics used in the study are questioned due to the large variation between surgical rates per 100,000 persons by State. For example, the overall surgical rate for medicaid eligibles varies from 2,819/100,000 in Missouri to 44,887/100,000 in North Carolina. Nevertheless, the authors report use of these variations to demonstrate the extent of unnecessary surgery with medicaid patients.

In the fifth item under the study's summary section it is stated, "that there is a higher proportion of unnecessary surgery among the Medicaid population than the population as a whole." Nowhere in the report is there an explanation of what constitutes "unnecessary surgery" or the criteria by which such a conclusion was reached.

The methodological soundness of the study is questionable because documentation was not presented for: (a) what tests were conducted for bias, validity and reliability, (b) how the data collected were verified, and (c) how extraneous variables were controlled.

This last point is particularly important because the data in the report are presented with the assumption that all socioeconomic variables, such as age, occupation, sex, income, and medicaid requirements, are constant in each State.



Dr. HANLON. I have read the document from which you were quoting, and I believe it does show striking variations in the rate of surgical operations in adjacent States and from medicare versus nonmedicare recipients.

On the other hand, I believe the document that stated that the basis on which the statistics were gathered varied immensely from State to State; that there were gross inadequacies in the method of collection, and that the comparability of the statistics was open to question.

In that document, it is stated that if there is a variation of perhaps 200 percent between the rate of surgery in one area, and the rate of surgery in another, it is ipso facto "unnecessary surgery" that is being done in the higher ratio area.

I think one could make the conclusion that is not necessarily "unnecessary surgery", nor does it necessarily mean that the place where the lesser amount of surgery is being performed is not being underserved.

Senator KENNEDY. Whatever additional comments you wish to make will be welcome, but it is not only the relationship between those on the medicaid versus those on nonmedicaid, it is made with regard to relatively—it is not just a question of regional, although the regional differences are significant, but even in border areas you get dramatic kinds of changes.

In this kind of study, we have not even reviewed what the comparative factors would be in sort of prepaid practice, such as the Kaiser permanente program—at different times, we in the hearings have had information of even a more dramatic nature in California, in the State of Washington, in the whole area of Puget Sound—you will find a much more dramatic picture with the prepaid practice versus those on the norm versus those on the medicaid.

I will be glad to include whatever your testimony or analysis that these kinds of figures should show, and I think, quite frankly, Doctor, if we do not recognize what I consider to be a strong kind of testimony, we are not going to be able to get very far. I think it is quite dramatic, and maybe it is wrong to come to various conclusions that may be drawn from this particular survey, but that contrast between prepaid, the norm and the medicaid in just about any area of the country would be staggering.

If you have any kind of information or statistics to show that is not the case, we would more than welcome it, because I do not think it is going to stand up. If you do, we would welcome it.

I do not believe that to be the case, and I would be glad to be proven wrong.

Dr. HANLON. Senator, I was not quarreling with the raw figures or impugning their reliability. It was the question of underserved versus overserved in an area, and this, of course, occurs with prepaid plans. There are obviously some incentives for operation by a certain kind of system, and disincentives to operation with others, such as certain prepaid plans.

Whether that means that those who under the prepaid plan have a smaller rate of operations, or of any other therapy, are thereby being undertreated, is, I think, something that has to be susceptible of analysis on each individual group of statistics.

Senator KENNEDY. That is the answer we have had. We had that 3 years ago, 5 years ago, and who has the ability to do the study?

You have the ability to do the study.

When does the study ever get done? It just is not being done. So we are back wrestling with this again.

I cannot understand why you could not help us try to show these things and have your own people do a study, set the kind of criteria which could be helpful and useful to Congress.

That is the thing that is just extraordinary to me where we get the complaints of lack of congressional action or heavy-handedness or whatever these factors are.

Maybe some of these studies are trying to justify other kinds of points.

Why can you not resolve these questions? Why can you not help us resolve these things? That is what we are asking for.

Why does not the American College of Surgeons find out what the norm is, what it is in prepaid, and what they are doing in medicaid, and say this is wrong, Senator, and if you want to do something to save the American taxpayer money, this is what we think we will do, we are going to run into problems, but this is what we are going to do, because this is a serious problem, and we want to make sure those who are associated with the College of Surgeons are trying to make sure that we have a national policy that makes some sense.

That is what we are asking for. That is what I am asking for.

What I get is that these statistics may be wrong in how they are devised; we cannot say that in prepaid they may not be better, but you cannot show they are healthier, and no studies have been done.

You must understand it is a matter of great concern to the American people. You cannot pick up a magazine every 4 months and not find a national story about whether there is too much surgery or unnecessary surgery, and the implications of that. Yet, the people who can resolve it, your group, are not doing it. It is not our Health Subcommittee that should do this but your group.

That is the kind of thing that I think would be enormously helpful.

Let me just ask, finally, Doctor, if you would like to make any comments?

Dr. HANLON. No.

I think that the SOSSUS study, in which the resources of the college and the American Surgical Association and many other specialty associations, as well as foundation resources and governmental resources, to the total of \$1.4 million, is a large and impressive study.

It is one which runs the risk—as you have heard, some of the figures were gathered in 1972—that by the time it is put into book form, the situation tends to outrun the data.

So that it is not either simple or a quick matter to gather these data on a reliable basis. I believe the updating of these data is what the college is attempting to do by establishing within the last year a Department of Surgical Practice which has as its objective the continual analysis and updating of just the kind of material that you have referred to.

I believe our study which you have read from and which I have only seen on the 19th of September—and we have not analyzed it in detail—I think the analysis and critique of those data are the sorts of things which we will be delighted to submit as a subsequent statement.



Senator KENNEDY. Fine. We would welcome that.

Particularly, when you get the kind of results on the SOSSUS Study that said even with the abundant data provided by the study, we cannot specify norms, you talk about the average annual workload which is slight by those standards, but they will not get into questions of norms on it.

Dr. Holden, if the Congress gives you this authority, will you accept it?

Dr. HOLDEN. Senator, I think you are referring to the CCME's acceptance of being responsible to the Secretary of HEW for the allocation of residency programs in this country.

My own attitude toward this is, as I stated before, that I think we can do this ourselves. I am convinced that we can.

In the event the legislation is passed, I would hope that the CCME does provide at least the policy upon which allocation is going to be made.

Senator KENNEDY. Dr. Nesbitt.

Dr. NESBITT. Senator, I think perhaps we should place it in a little bit different perspective.

Should such legislative language come into being, it would require reassessment of the position of all five associations as to what precisely do we choose to undertake in this regard.

As I stated previously, we all would like to participate in the decisionmaking. We feel that it can come in the voluntary sector without requiring statutory legislation by virtue of the indicators that are already intact and beginning to surface.

We think we will have the data in greater detail in another 60 days.

Senator, if I may, relative to the subject you and Dr. Haddon were discussing, I think you have presented us with a challenge that all of us would like to examine and refute from a statistical standpoint.

I happen to sit on my State's Medicaid Advisory Council and have since it was first appointed. I serve as chairman of my State's Peer Review Committee—I just received an extensive review of so-called medicaid abuses.

These statistical analyses would be not only of benefit to your committee but they would, we think, be of benefit to our profession as well.

You do appreciate the difficulty in assessing these from our standpoint, but I think perhaps I might command some of those organizations to at least a consideration of the challenge you propose, and we will make an effort to examine these other statistics and make an effort to try to provide supplementary information, perhaps augment the material in the SOSSUS study.

We know for a fact that there are many explanations of some of the statistics that you have given us. They are contradictory to a degree. But I think that is a reasonable challenge, and I would hope that perhaps we could respond.

Senator KENNEDY. That would be very helpful. We would be grateful for that.

Thank you very much, gentlemen.

We will call as our third panel Edward F. X. Hughes, M.D., who is assistant professor in the Department of Community Medicine at the Mount Sinai School of Medicine, research associate at the National

Bureau of Economic Research, and chairman of the Subcommittee on the Delivery of Medical Care of the Committee on Public Health of the New York Academy of Medicine.

**STATEMENT OF EDWARD F. X. HUGHES, M.D., M.P.H., ASSISTANT PROFESSOR, DEPARTMENT OF COMMUNITY MEDICINE, MOUNT SINAI SCHOOL OF MEDICINE; RESEARCH ASSOCIATE, NATIONAL BUREAU OF ECONOMIC RESEARCH**

Dr. HUGHES. Senator, in addition to my prepared testimony, I have a number of documents that I would like to submit for the record.

Senator KENNEDY. They will be included in the record at the conclusion of your testimony.

Dr. HUGHES. For the last 5 years, I have been project director of the surgical manpower project at the Mount Sinai School of Medicine and at the National Bureau of Economic Research. This project, funded by the National Center for Health Services Research, was initiated at a time when the major thrust in health manpower legislation was directed toward the correction of an alleged "doctor shortage" in the United States.

The research conducted under our surgical manpower project was the first both to develop a unit of measure of surgical work, the hernia equivalent, HE, and to systematically measure the work of a population of surgeons.

Our first paper, "Surgical Work Loads in Community Practice," published 3½ years ago, demonstrated an excess supply of general surgeons on one community in the New York metropolitan area and, suggested on the basis of then existing national and regional data, that such an excess supply of surgeons might not be an isolated finding.<sup>1</sup> The SOSSUS study has proven that our results were indeed not isolated findings.<sup>2</sup>

In view of the apparent excess supply of general surgeons, we then asked the question as to whether surgical residency programs might not be training too many surgeons.

Hypothesizing that the specialty maldistribution uncovered in our first study owed its origins to an excess production of residents in the field of general surgery, we measured the operative workloads in one hospital's general surgical residency program.<sup>3</sup> In this program, we found mean operative workloads of primary surgery of less than one HE per week (i.e., less than about an hour per week)—in the first year of training, and less than three HE per week in the second, third and the fourth years.

In this study, published 2 years ago in the *New England Journal of Medicine*, we stated:

"If the operative workloads of residents in the early years of training in other hospitals and in other surgical specialties were found to be similar to those in this study, and if there were a comparable underutilization of non-

<sup>1</sup> Hughes, E. F. X., Fuchs, V. R., Jacoby, J. E., and Lewit, E. M.: Surgical work loads in a community practice. *Surgery* 71: 315-327, 1972.

<sup>2</sup> American College of Surgeons and American Surgical Association: *Surgery in the United States*, 1975.

<sup>3</sup> Hughes, E. F. X., Lewit, E. M., and Rand, E. H.: Operative work loads in one hospital's general surgical residency program. *New England Journal of Medicine* 289: 660-666, Sept. 27, 1973.



operative skills, it would not seem unreasonable that the number of residents in certain residency programs could be produced. With a reduction in the number of residents, the service component of residency training could be assumed in some measure by physician associates or other ancillary health personnel. A reduction in the number of residents in appropriate programs would appear to increase the efficiency of the delivery of surgical education and, at the same time, by decreasing the output of specific types of surgeons, promote a more efficient utilization of the surgical skills of residents when they later enter practice.<sup>1</sup>

We followed this study with a longitudinal analysis of the growth of surgical residency positions in the United States since 1940, and demonstrated that if positions offered in such specialties as plastic surgery and orthopedic surgery were to continue to grow at the same rates as in the years from 1966 to 1973, e.g., 8 percent and 6 percent continuously compounded per annum respectively, the number of positions offered in those two specialties could be expected to double in 8 and 11 years.<sup>2</sup>

In extending our investigations to the determinants of the growth and location of residency positions, my coworker, Mr. Eugene Lewit, and I have been recently funded by the National Center of Health Services Research to explore the development of both an economic model of the market for residents from data supplied by the national intern and residency matching program and a time motion methodology to investigate the work of residents.

I mention our past research findings and conclusions, and our current efforts in such detail to convey to you the depth of our concern with a specialty maldistribution in American medicine and to demonstrate our attempts to measure it and to suggest solutions to it.

It is with this depth of concern in mind that I turn to the current legislative proposals pending to ameliorate the specialty maldistribution in American medicine. To date, it is not known why a hospital demands the number of residents by service that it does.

The demand for residents for a given specialty service by a hospital would appear to be influenced by a number of variables, including the number of inpatients on that service; the number of outpatient visits to that service; the case mix of the patients served therein; the size of the hospital; the size of its private services; its educational propensity; perhaps measured by its medical school affiliation status; the salary of residents; their work schedules; the availability of substitute labor and a host of other variables.

Of these many variables, I feel variables, as the number of inpatient ward beds, the number of outpatient visits, the number of private patients, and the case mix of the patients in all of these categories are among the most important. Accordingly, I am concerned by the proposed residency control measures insofar as they raise the possibility of moving residents out of hospital environments in which the demand for their services has evolved over many years, often decades, in large numbers in a relatively short span of time.

In raising these concerns, I am particularly concerned about the large urban hospitals in cities, as New York, where residents supply

<sup>1</sup> Hughes, E. F. X., Lewit, E. M., and Rand, E. H.: Operative work loads in one hospital's general surgical residency program. *New England Journal of Medicine* 289: 660-666, Sept. 27, 1973.

<sup>2</sup> Hughes, E. F. X.: The demand for surgical residents: some preliminary observations. *Surgery* 76: 176-183, 1974.

not only critically needed patient care services but essentially the only patient care services available to millions of poor, near-poor, and elderly citizens.<sup>1</sup>

The reality of the latter is particularly highlighted in the case of New York City by the fact that in the borough of Brooklyn alone in 1974, residents provided services for 1,031,000 outpatient physician visits in the municipal hospitals and 500,000 of these visits were to an emergency room. The concern I have of cities like New York losing residents is further heightened by the fact that 93 percent of residents in Brooklyn are foreign medical graduates, an unfortunate target of this legislation.<sup>2</sup>

My concerns about urban hospitals are accentuated by the attempt of the residency control measures to correct simultaneously not only for a specialty maldistribution but also for a perceived geographical maldistribution. I would like to discuss my concerns about these redistribution measures as a researcher first because the validity of the assumptions on which they are based are questionable and then elaborate on the specific problems they pose for urban hospitals.

Relevant to the geographic redistribution measures, three important research findings should be pointed out. The first is that although the correlation between location of a physician's eventual practice and his place of residency training is the highest of any single variable felt to influence practice location, the direction of causation within that correlation is not known.<sup>3 4</sup>

Thus, it is plausible that some, if not many, of those residents who train in a given location do so because it is a pleasant place in which to train and either they wouldn't be opposed to settling there or they are in fact planning to settle there. Circumstantial evidence for this hypothesis can be found in the fact that American graduates fill all but 5 percent of California's occupied residency positions while across the country they fill approximately only 75 percent of occupied positions, with FMG's filling the remainder.

Thus, although one might anticipate as a result of geographic redistribution methods some residents settling in areas they might not otherwise have trained in, one could also reasonably anticipate that the correlation between site of training and practice location could be much lower under such measures as residents, after completing training in a region, could move to the region in which they want to practice and would have originally trained in, had a position been available.

This likelihood would also be enhanced insofar as a specialty redistribution of residents would reduce the competition for specialists across the country and render their moving and practicing in settings other than where they trained easier than at present.

The body of research on the correlation of location of residency training and practice location also suggests that the sensitivity of practice location to residency training is of such a magnitude that manip-

<sup>1</sup> In addition to urban hospitals, State hospitals, especially long-term facilities, could also be adversely affected by these proposed measures.

<sup>2</sup> To my knowledge, no data exists demonstrating that foreign medical graduates, controlling for setting, deliver systematically poorer care than U.S. graduates.

<sup>3</sup> Hadley, J. : Physicians' Speciality and Location Decisions: A Literature Review. National Center for Health Services Research, 1974.

<sup>4</sup> Yett, D. E., Sloan, F. A. : Migration patterns of recent medical school graduates. *Inquiry* 9 :125-142, 1974.



ulation of site of training alone would appear to be a weak policy instrument for influencing practice location.<sup>1 2</sup>

The third finding worth mentioning emanates from work being currently performed by Dr. Philip Held of Mathematica, Inc., as part of HEW's health insurance study. In this work, Dr. Held conducted a national telephone survey of physician offices designed to measure levels of access to medical care and tightness for physician services. Tentative data from this study show that the differences between nonmetropolitan areas and metropolitan areas with respect to these variables were not substantial.<sup>3</sup>

In addition, in examining access in HEW designated physician shortage rural areas, Dr. Held found evidence that access to physician services in these designated physician shortage areas was comparable to other nonmetropolitan areas in the same region, which in turn were comparable to metropolitan areas.

These findings led Dr. Held to state: "There does not appear to be a shortage of physicians, as defined in an economic sense, in HEW designated physician shortage counties. In fact, there is even some suggestion that, at least for the north-central region, there may even be a surplus of physicians relative to other nonmetropolitan areas."<sup>4</sup>

Senator KENNEDY. Why is that?

Dr. HUGHES. I do not know, sir.

Senator KENNEDY. Does that make sense?

Dr. HUGHES. These findings should not be taken to imply there are not problems in the delivery of rural health services or that the political pressures generated by these problems are not real and intense. They do imply, however, that the simple addition of physicians to these shortage counties would not measurably improve access to health services. Thus, as a researcher, I am concerned about the geographic redistribution measures insofar as I have reservations about the validity of the assumptions on which these measures are based.

As stated previously, I am particularly concerned about the geographic redistributive measures because of their potential impact on urban hospitals. S. 989 instructs the various councils, national and regional, to assess the service and educational needs within the various regions and to recommend appropriate numbers of residents by specialty for each region. I will surmise that it will not take the various councils long to realize that one in every six residents in general surgery and internal medicine in the United States is now training in the New York City metropolitan area, exclusive of New Jersey and Connecticut and the overwhelming majority of these are in New York City. Were one to aggregate the number of residents similarly serving urban populations across the United States, it would appear reasonable that the majority of residents in the United States might be thus accounted for.

<sup>1</sup> Yett, D. E., Sloan, F. A.: Migration patterns of recent medical school graduates. Inquiry 9: 125-142, 1974.

<sup>2</sup> Held, P. J.: The Migration of the 1955 to 1965 Graduates of American Medical Schools. Ford Foundation Program for Research in University Administration, Berkeley, Calif., unpublished, 1973.

<sup>3</sup> Held, P. J.: Shortages of Medical Care in Rural Areas: An Economic Diagnosis. Mathematica, Inc., Princeton, N.J., unpublished manuscript, 1975.

<sup>4</sup> Ibid.

I will further surmise that it will not be long before various regions, especially those perceived to be underserved, will be conferring among themselves as to how many of these New York City positions they would like to have. In view of New York City's success at the moment in being able to convince Washington of its needs, it is not difficult to hypothesize who may win out in these deliberations.

This could become an especially bitter problem as regions could seek a given specialty position for different reasons: one in hope of eventually filling a perceived shortage for that specialty in their region through the settlement there by the resident, while the other region sought the position to meet definitive service needs of its inner city populations.

It is difficult for me to imagine how equitable decisions could be reached in such instances of a conflict between regions for a given position. Thus, to the extent that the current legislation implies the possibility that, at the margin, a given region could be assigned a residency position only at the expense of another region, I see it as very divisive and potentially destructive of both the short-run and long-run public health of regions.

Thus, a more equitable approach might be: (1) to call a moratorium on the overall growth of residency positions excluding primary care within regions, (2) to attempt to bring the demand for and the supply of residents within regions more in line with a desired specialty manpower mix, and (3) after that process has stabilized, to attempt carefully to redistribute by region any specialty positions designated as surplus by other regions. If such an intraregional emphasis were not stressed, the highest priority of some regions could become the protection of its stock of residents and valuable opportunities for both intraregional cooperation in specialty redistribution and intraregional diminution of specialty positions could therein be lost. Emphasis on intraregional redistribution could allow for the appropriately phased and evaluated substitution of other health personnel for residents and for interspecialty substitution of residents.

For instance, family practice residents could assume some of the duties of general surgical or even neurosurgical residents. In addition, interns in internal medicine could rotate for 1 month not only through the inpatient surgical service but also through the surgical emergency room as they did at the Columbia Presbyterian Medical Center in New York when I was a surgical house officer. I shall discuss the possible substitution of other health personnel below.

By focusing more exclusively on interspecialty substitution within individual hospitals, between hospitals related by explicit referral networks and within specific regions, a valuable opportunity could be realized for the development of collaborative arrangements between institutions that could facilitate both the referral of patients for specialty care and possibly the explicit assumption by specific institutions of responsibility for comprehensive care of entire populations of patients.

As a medical educator, I am also concerned about the possible propulsion by this legislation of residency positions away from traditional centers of academic excellence. Academic medical centers as a whole have often been distinguished by their lack of leadership both



in the provision of community services and in the fostering of specialties as community medicine or primary care. From the perspective of quality of graduate medical education, however, the impact of a possible centripetal movement of residency positions from centers of academic excellence would have to be evaluated. I am also concerned about the wisdom of legislation which would appear to have as a goal the provision of services in allegedly underserved areas by large numbers of solo physicians. It would be important that appropriate continuing education, support personnel and support services also be provided for solo physicians entering such allegedly underserved areas.

It is important to bear in mind that the threat of massive dislocations in the residency marketplace as a result of the enactment of these control measures is mitigated by the fact that the rising number of U.S. medical school graduates over the next 5 years will swell the number of American graduates to within some reasonable percentage of current first year residency positions.

Thus, rather than initially imposing a fixed ceiling on residency positions offered at 125 percent of a graduating class or at any other arbitrary, however well-intentioned, figure, a moratorium on the growth of specialty positions, with some flexibility to allow for legitimate exceptions, might be an effective compromise and one that could forestall on many of the above mentioned negative externalities.

When appropriate data and mechanisms of substituting for residents have been worked out and a state of equilibrium reached, some flexible relationship of offerable residency positions to the number of American graduates then could be suggested.

The complexity of the problems raised by the residency control measures is highlighted by the fact that any positions eliminated will have to be substituted for, if not by another resident then by other health manpower. The effective substitution of specialty residents on any large scale will require three additional ingredients: time, other resources, and knowledge.

These are in many ways inseparable, but I would like to dwell initially on the first two and then cover the last of these. It may be that the New York City area should not have one in every six residents in internal medicine and general surgery in the United States or that other cities should not have the number of residents they do but the service requirements for residents in many of the hospitals in these cities have often evolved over a hundred years, often in response to urban migration and the relative abandonment of inner cities by primary care physicians.

To suggest that appropriate manpower substitution for some of these residents could be achieved in 2 or 3 years would accordingly appear to be unrealistic—even assuming full knowledge of who should be substituted and the most efficient way to do so.

Proponents of the control measures point to the substitution of residents by physician assistants—PA's—as we did in our study of residents, and by the National Health Services Corps. The facts remain that nonphysician manpower as PA's, even if they were to be available in sufficient numbers, would have to be trained and gradually introduced into a variety of settings and that it would appear to be a

while before the National Health Services Corps could effectively substitute on a large scale in urban areas. Thus, I see the process of specialty substitution as one covering a 10-year time horizon in which incremental and carefully controlled substitutions could be effectuated; evaluated over time; and, pending successful outcomes, expanded.

The substitution of other manpower for residents will also cost money. Mount Sinai Hospital in New York has been using physician assistants in place of residents for 3 years. This experience has shown that 1.5 PA's must be substituted for each resident replaced to offset the fact that PA's don't work the double daily shift customarily worked by residents.

Accordingly, with PA's currently earning the same mean salary as residents, such a substitution increases costs by 50 percent. Replacement of residents with attending physicians, in many ways perhaps the most realistic form of substitution, could be even more costly, even if such a substitution were to be associated with some increased productivity. The costs of hiring attending physicians would be increased even further in a system where residency positions were cut back and the number of specialists decreased, since the opportunity costs to a physician working full time in a hospital could therein be expected to increase. It remains to be seen what incentives would be needed to hire such a pool of physicians.

Thus, the net result of the impression I would like to leave with you today is that the market for residents is an extremely complex one about which we have little solid knowledge, much speculation, and much to learn before national manpower planning can be effectuated. It is in this light that the framers of S. 989 call for studies to shed light on this process.

The S OSSUS study took over 4 years; my own work has been underway over 5 years; the health insurance study has been underway for 3 years. Accordingly, it seems unrealistic to set an apparent 18-month deadline on the major study proposed in the bill. While some of the charges given to that study could be performed in 18 months, some could not.

This is especially true of the charges to develop "optimum" methodologies where none now exist. Similarly, the studies asked of the regional councils to assess service needs of and the educational components of programs in their regions are not simple ones and will require time and skilled manpower if they are to be performed well.

I am also concerned about the personnel suggested for the various councils and the extent of their ability to evaluate the limitations of the proposed studies and the costs and benefits of various policy alternatives. Thus, I feel it would not be inappropriate to include on such councils health economists who could articulate the costs as well as the perceived benefits of various options as well as medical sociologists who could suggest, and thereby perhaps mollify, some of the possible negative externalities that might be anticipated in intervening in as complex an organization as a teaching hospital.

Questions remaining to be addressed entail the appropriate organization and repository of reform, if any, in the specialty redistribution of residency positions. The problem is an important one and would argue for reform consistent with the longrun health of the American



health system. Though proponents of Federal control minimize the extent of ongoing reform in the private sector, it is real.

The private sector in American life, not limited by any means to health, has been famous for ferreting out in its house any ripple of reform and portraying it in the proportions of a tidal wave. This has cost the private sector credibility.

In this issue, the same questions of credibility exist. As an independent observer, I can attest that there are definitive initiatives in the private sector working in the direction of a redistribution of specialists. Inquiries to a number of individuals in the New York area over the past few days have brought testimony of cutbacks in the number of surgical residency positions offered and the disapproval of some other programs.

When Dr. Moore says he would like to see a substantial cutback in American surgical residency positions, I believe he is being sincere in attempting to address this problem. In addition, such a recommendation would appear to have the potential of being favorably received by the American surgical community, if for no other reason, than it is in the longrun economic interest of every American surgeon to have surgical residency positions, in the aggregate, cut back.<sup>1</sup> Thus, I view as a concern the possibility not that the surgeons will not go far enough in cutting back residency positions, but that they could go too far and that in 20 years we could be faced with a relative specialty shortage and problems of access to surgical care.

I have generic concerns about the existence of monopoly power in any setting. Accordingly, I would like to see some sort of flexible partnership arrangement whereby the public sector could have a role in expressing its views about the appropriate specialty mix of physicians and have that voice carry some weight. I am opposed to the fixing of arbitrary ceilings, however, as I see no evidence that such ceilings guarantee more benefit than harm.

Another initiative in the private sector is that of the development of family practice—primary care residency programs. Since these programs existed in such small numbers, their growth, when expressed in terms of percent increases per annum, appears astronomical. The growth is real, however, and gives evidence of continuing. It remains to be seen, however, whether these programs and their graduates are proven to be as efficacious in meeting the health needs of America as their proponents claim.

Concomitant with their continued growth, I can see a fairly natural alliance between primary care physicians and surgeons developing that would foster their growth provided, of course, that primary care physicians stay out of the operating room and refer their surgical patients to surgeons. The primary care movement most directly conflicts with internal medicine where the delineation of the role of the primary care physician and the internist could be anticipated to continue to provide controversy.

This is a controversy that could be expected to last for some time and it would appear worthwhile to have a public voice in its delibera-

<sup>1</sup> Surgeons might object to cutbacks in specific programs as such cutbacks could diminish coverage of private surgical patients and therein increase the work for the surgeons themselves, and therein also possibly increase the costs to patients.

tion. Thus, it would appear appropriate that a flexible partnership arrangement be worked out between the private and public sector to develop appropriate knowledge and informed policy alternatives in this important area.

A recent article by Dr. Charles Edwards, former Assistant Secretary for Health excoriated the private sector in health for failure to develop responsible leadership to addressing the Nation's health care problems.<sup>1</sup> It should be noted he had little favorable to add about the Federal Government's role in addressing these problems either.

The leadership of the private sector appears at this moment very concerned about the problem of specialty maldistribution. This concern in large part stems from anxiety over what might happen if the private sector did not act on this problem and the Federal Government intervened in a massive way. Be that as it may, a plurality of forces within the private sector is converging on this issue from a variety of quadrants and appear to be advocating the same goals.

I have already mentioned the surgeons and the family practitioners. An additional force is the rapidly rising rate of resident salaries at a time of increasingly fixed hospital reimbursement rates. This force will move to array hospital administrators on the side of a gradual reduction of specialty residency positions, if they are not already so inclined. I would favor a relationship between these forces and the Federal Government and that allowed the momentum in the private sector to continue in the direction it is going, that evaluated both the progress and the goals of that momentum, and suggested alternative actions if goals were not being met.

If the private sector were not to persevere in its current initiatives and not to provide evidence why such perseverance would be contrary to the public good, then it would appear appropriate for the Federal Government to take the initiative and in an enlightened, knowledgeable and incremental way to attempt to correct the problem.

Before a new drug can be introduced to the American public it must undergo extensive clinical trials to show its clinical efficacy, i.e., that it works, and extensive toxicologic studies to determine the extent to which it might cause harm. These screening procedures are backed by Federal law.

In the area of health service delivery and manpower education, however, it is not unusual for both the public and the private sector to suggest wholesale alterations in methods of delivery or of education without any controlled trials to ascertain whether these alterations will work or any studies to evaluate the potential harm they might cause. Examples that come to mind are the recent "abolition" of the internship and the current proposals for certification reform initiated by the National Board of Medical Examiners.<sup>2 3</sup>

The proposal for residency specialty redistribution is one that cuts to the very heart of graduate medical education and the delivery of health services and yet we have no proposals for limited trials to see

<sup>1</sup> Edwards, C. C.: The Federal involvement in health: a personal view of current problems and future needs. *New England Journal of Medicine* 292: 559-562, 1975.

<sup>2</sup> Engel, G. L.: Must we precipitate a crisis in medical education to solve the crisis in health care? *Annals of Internal Medicine* 76: 487-90, 1972.

<sup>3</sup> National Board of Medical Examiners, Committee on Goals and Priorities: Evaluation in the Continuum of Medical Education: Report. Philadelphia, 1973.



if redistribution could work in a given area and no measures of its potential costs or harm.

This area is a very complex one and one that should be approached with a fair amount of humility on all sides. It should be approached with the appropriate resources, time horizon, and flexibility to insure whatever is done is in reality in the long-term interest of the health of the American people and consistent with the national goal of availability of high quality health care to all Americans. The proponents of the resident control legislation are responding to real and important political pressures and it would appear appropriate for the public and private sectors to put their heads together and come up with a valid plan to cope with the problems generating these pressures.

I would be remiss if I did not include one other item in my testimony. A major ingredient required in any successful approach to a correction of our problems of specialty maldistribution is the acquisition of new knowledge. Critical ingredients in the success of medical research in this country have been the elements of peer review and competition for available funds.

It is with concern that I see, yet again, further proposed legislation designating an unnamed entity the sole recipient of funds to perform extensive research on problems of critical national importance—problems that some other researchers have devoted the bulk of their professional careers to pursuing.

This problem becomes especially critical when the sum of money called for in this proposed legislation is \$10 million and the sum of new money available from the national center for health services research through grants for research to all of the independent investigators in the United States is \$2 million. I am accordingly concerned about the growth of monopoly in the health services research community. I am also deeply concerned about the very ability of pluralism and creativity to survive in that sector knowing that, at the same time that the Federal Government is pursuing major health services initiatives that require critical new knowledge for evaluation and successful implementation, that same Federal Government is simultaneously withdrawing support for health services research, the sole avenue for the generation of this new knowledge.

Senator KENNEDY. Thank you very much.

I think there is a great deal to that. All you have to do is look at the cuts in the health services in the appropriations just last week, and those additional cuts in those areas. It just underscores the point which you make here, with which we completely agree.

I think you have to develop this kind of information so we know where we are going, and we are just not doing that. We are spending billions of dollars in areas in which I am not sure we really understand the public policy implications.

It may be that we will end up with an aspect of open-endedness which was not intended initially and which we have not been very effective in getting a handle on at the present time.

Dr. HUGHES. I think, sir, you will continue to be frustrated in seeking answers to questions as those you have been asking this morning until there are sufficient funds for policy and relevant health services research engaged in that research. At the moment, the number of peo-

ple addressing these questions is very small, and, if the cuts continue, it can be anticipated that this number will fall.

Senator KENNEDY. That is very unfortunate.

You talk about the partnership, which I completely agree with. Can you be more specific on the nature of the structure that that partnership could take?

Dr. HUGHES. Well, Senator, I am not a political scientist.

Senator KENNEDY. You do not need to be a political scientist.

Dr. HUGHES. I think there has to be mutual exchange of information. I am very sensitive to the origins of this legislation and to the sincerity of its authors. I am, however, quite concerned about the lack of information on the Federal side about the complexity of the resident marketplace. I am also a little bit concerned about the lack of information in the private sector.

Accordingly, I think an appropriate mechanism to be set up would be some sort of—I hate to use the term—commission or what, whose first goals would be an exchange of information and the provision of adequate resources to accumulate knowledge in this field to suggest possible policy alternatives.

Senator KENNEDY. Is that not what is intended in the Rogers bill? Should not the CCME have the information on which these judgments can be made?

Dr. HUGHES. No, sir; I do not believe so. I think it is premature to anticipate that there now exists sufficient information in this area to make rational policy decisions.

The generation of the information required to make these policy decisions intelligently would necessitate a study as large in scope as, if not larger than, the SOSSUS study. The people who performed that study should be congratulated for having seriously addressed the questions that they did and not ridiculed because they can't produce answers to all the questions being asked. That study has raised more questions than it has answered. I think that these gentlemen are being honest when they say there is a lack of information.

I do not feel sufficiently informed at present to evaluate CCME assuming these responsibilities.

Senator KENNEDY. You are not prepared to comment on those arrangements?

Dr. HUGHES. That is not my field, but I think there must be some mechanism whereby people could sit down in a forum such as this and discuss these problems on an on-going basis. It would then seem appropriate that certain goals be agreed on and plans to reach those goals formulated.

I find that arbitrary and fixed goals such as that 50 percent of residencies be in general practice, are difficult to live with and attempts should be made to formulate flexible and reasonable goals.

In addition, I would think it appropriate that the public sector both ask the private sector to report on its progress periodically and have sufficient power to stimulate the private sector to carry out agreed on goals, if it lags in pursuing them.

I believe that, at this moment, the private sector is sincere in attempting to address this issue. This sincerity derives, in part, from the



fact that they know if they do not do the job properly, the Federal Government will take over. I also think there is a legitimate concern that the public welfare is presently not being served.

Senator KENNEDY. What is your reaction to the SOSSUS study with regard to the operative workloads of the various surgical specialties?

Dr. HUGHES. I believe that is a foregone conclusion.<sup>1, 2, 3</sup> I think the study had to be performed to demonstrate this was a national problem.

Senator KENNEDY. What is a national problem?

Dr. HUGHES. I believe there is a specialty maldistribution in American medicine. There probably are too many surgical specialists and that an appropriate reduction in the number of surgical residency positions is indicated.

It is quite inappropriate however to hold up to public scorn the American surgical community without directing some attention toward the medical specialties.

I think a great many medical specialists are being trained and could continue to be trained under the guise of being primary case physicians, and I think it would be very appropriate for the non-surgical side of the medical community to start looking intensely at its own production of specialists.

The American College of Surgeons, by initiating the SOSSUS study, has demonstrated its leadership in this area. I believe a similar study of the medical specialties might find similar problems of maldistribution.

Senator KENNEDY. Why do you think that studies have not been done about the comparison of operative rates in the different populations referred to earlier?

Dr. HUGHES. Sir, if I could be honest with you, the performance of such studies are exceedingly difficult and require substantial resources. I very much would like to study that problem. We, however, submitted a grant request to study the residency marketplace. At that time, we thought the pursuit of the latter study of more immediate policy relevance than the former. We were funded at 12.3 percent of our original request. Accordingly, we now have no funds for our study beyond December 31, 1975, and we are now spending all our time trying to generate additional funds to keep that study going when we could instead be working both to provide valuable information for you and to initiate additional studies addressed at questions as unnecessary surgery.

Studies such as you are requesting are exceedingly complex to perform and require highly trained individuals. If I were to walk into the operating room of any hospital in the United States and suggest I wanted to do a case of open-heart surgery, you could hear screaming all the way from the Atlantic Ocean to the Pacific.

<sup>1</sup> Hughes, E. F. X., Fuchs, V. R., Jacoby, J. E., and Lewit, E. M.: Surgical work loads in a community practice. *Surgery* 71: 315-327, 1972.

<sup>2</sup> Hughes, E. F. X., Lewit, E. M., and Rand, E. H.: Operative work loads in one hospital's general surgical residency program. *New England Journal of Medicine* 289: 660-666, Sept. 27, 1973.

<sup>3</sup> Hughes, E. F. X., Lewit, E. M., and Lorenzo, F. V.: Time utilization of a population of general surgeons in community practice. *Surgery* 77: 371-383, 1975.

It is not uncommon, however, for individuals unskilled in the disciplines of health services research to undertake "research" in this area. The results often leave much to be desired. I believe that the gentlemen who preceded me at this table for the most part do not have within their organizations the resources or the research capabilities to provide the answers you want. To do so would require the addition to their staffs of many talented researchers and the acquisition of substantial resources.

I know that many of these organizations do have research components, but at the moment they are overwhelmed in trying to address what aspects of these questions they are able.

Senator KENNEDY. I think that as a public policy, some kind of evaluation ought to be required in the bills we pass. We have spent billions of dollars in education, \$8 billion a year in secondary education, in a variety of Federal programs, and then we short circuit the kind of review because it looks esoteric, and then we find an example which gives a black eye to that whole kind of review, and as a result we are legislating in a vacuum.

We will try at the next opportunity to see what can be done in terms of entitlement programs for an R. & D. I do not see how people can vote against that. Then we will see what can be done, but I think that point is very well made.

Did you make a comment before as to whether there were too many surgeons in the United States?

Dr. HUGHES. Oh, yes. I have made that comment for 5 years. In fact, members of the surgical community have strained the bounds of civility in responding to my articles in both their journals and other journals. It is a demonstrated fact now.

I would not, however, pound it over the heads of the members of the surgical community. I think they are aware of it, and they are legitimately trying to cope with it. As Dr. Moore said, the distribution of surgeons across the country appears to be fairly uniform, with some exceptions.

Senator KENNEDY. It was not too clear earlier in the day.

Dr. HUGHES. No.

Senator KENNEDY. As I said in my opening statement, I think a balance has to be worked out, and it seems to me we have to recognize what the problems are before we can expect to answer them. If you cannot recognize what the problems are, we just end up with other kinds of legislation which does no one any good. That is why your comments have been extremely helpful.

We would like to stay in touch with you as we go through the legislation. I think it would be very helpful to us in terms of developing it—I want to give you assurance in the legislation there is nothing that puts a sort of mandatory requirement about these cutoffs—I think you have stressed them very appropriately—so there can be some adjustment.

We leave that reasonably open so we can strengthen those provisions.

We want to thank you very much.

[The prepared statement of Dr. Hughes and additional material subsequently supplied for the record follows:]



Testimony given by

Edward F.X. Hughes, M.D., M.P.H.

Mount Sinai School of Medicine and  
National Bureau of Economic Research

before the

Senate Subcommittee on Health

at its hearing

on

Residency Control Measures

September 30, 1975

For the last five years, I have been project director of the surgical manpower project at the Mount Sinai School of Medicine and at the National Bureau of Economic Research. This project, funded by the National Center for Health Services Research, was initiated at a time when the major thrust in health manpower legislation was directed toward the correction of an alleged "doctor shortage" in the United States. The research conducted under our surgical manpower project was the first both to develop a unit of measure of surgical work, the hernia equivalent (HE), and to systematically measure the work of a population of surgeons. Our first paper, "Surgical Work Loads in Community Practice," published three and a half years ago, demonstrated an excess supply of general surgeons in one community in the New York metropolitan area and, suggested on the basis of then existing national and regional data that such an excess supply of surgeons might not be an isolated finding.<sup>1</sup> The SOSSUS study has proven that our results were indeed not isolated findings.

In view of the apparent excess supply of general surgeons, we then asked the question as to whether surgical residency programs might not be training too many surgeons. Hypothesizing that the



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specialty maldistribution uncovered in our first study owed its origins to an excess production of residents in the field of general surgery, we next turned to measuring the operative work loads in one hospital's general surgical residency program.<sup>2</sup> In this program, we found mean operative work loads of less than 1 HE per week of primary surgery (about an hour's worth) in the first year of training, and less than 3 HE per week in the second, third and the fourth years. In this study, published two years ago in the New England Journal of Medicine we stated:

"If the operative work loads of residents in the early years of training in other hospitals and in other surgical specialties were found to be similar to those in this study, and if there were a comparable underutilization of nonoperative skills, it would not seem unreasonable that the number of residents in certain residency programs could be reduced. With a reduction in the number of residents, the service component of residency training could be assumed in some measure by physician associates or other ancillary health personnel. A reduction in the number of residents in appropriate programs would appear to increase

the efficiency of the delivery of surgical education and, at the same time, by decreasing the output of specific types of surgeons, promote a more efficient utilization of the surgical skills of residents when they later enter practice."<sup>2</sup>

We followed this study with a longitudinal analysis of the growth of surgical residency positions in the United States since 1940 and demonstrated that if positions offered in such specialties as plastic surgery and orthopedic surgery were to continue to grow at the same rates as in the years from 1966-1973, e.g. 8% and 6% continuously compounded per annum respectively, the number of positions offered in those two specialties could be expected to double in 8 and 11 years.<sup>3</sup> In extending our investigations to the determinants of the growth and location of residency positions, my co-worker, Mr. Eugene Lewit, and I have been recently funded by the National Center of Health Services Research to explore the development of an economic model of the market for residents from data supplied by the National Intern and Residency Matching Program and to develop a time motion methodology to investigate the work of residents.

I mention our past research findings and conclusions and our current



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efforts in such detail to convey to you the depth of our concern with a specialty maldistribution in American medicine and to demonstrate our attempts to measure it and to suggest solutions to it.

It is with this depth of concern in mind that I turn to the current legislative proposals pending to ameliorate the specialty maldistribution in American medicine. To date it is not known why a hospital demands the number of residents by service that it does. The demand for residents for a given service by a hospital would appear to be influenced by a number of variables including the number of inpatients on that service the number of outpatient visits to that service; the case mix of the patients served therein; the size of the hospital; the size of its private services; its educational propensity; perhaps measured by its medical school affiliation status; the salaries it pays its residents; their work schedules; the availability of substitute labor and a host of other variables. Of these many variables, I feel variables as the number of inpatient ward beds, the number of outpatient visits, the number of private patients and the case mix of the patients in all of these categories are among the most important. Accordingly, I am concerned by the proposed residency control measures insofar as they raise the possibility of

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moving residents out of hospital environments in which the demand for their services has evolved over many years, often decades, in large numbers in a relatively short span of time. In raising these concerns, I am particularly concerned about the large urban hospitals in cities as New York where residents supply not only critically needed patient care services but essentially the only patient care services available to millions of poor, near-poor and elderly citizens.\* Were the residency control measures as specified in bill S989 to focus more exclusively on inter-specialty substitution within individual hospitals, within hospitals related by referral networks or within specific regions, I could rest a little easier for the substitution of resident services could be more easily arranged. For instance, family practice residents could assume some of the duties of a general surgical or even a neurosurgical resident; interns in internal medicine could rotate for one month not only through the inpatient surgical service but also through the surgical emergency room as they did at the Columbia Presbyterian Medical Center in New York when I was a surgical house officer; or patients in need of

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\*In addition to urban hospitals, state hospitals, especially long term facilities could also be adversely affected by these proposed measures.



certain specialty services could be transferred within related institutions with the cost of such transportation both provided for in and calculated as a cost in the residency control measures.

My concerns about the urban hospitals are accentuated by the attempt of the residency control measures to correct simultaneously not only for a specialty maldistribution but also for a perceived geographical maldistribution of physicians. I would like to discuss my concerns about these redistribution measures first as a researcher, then as a medical educator and then return to my concerns as an urban physician.

Irrelevant as they may seem to some proponents of the geographic redistribution measures, three important research findings should be pointed out for the record. The first is that although the correlation between location of a physician's eventual practice and his place of residency training is the highest of any single variable felt to influence practice location, the direction of causation within that correlation is not known.<sup>4</sup> Thus, it is plausible that some, if not many, of those residents who train in a given location do so because it is a pleasant place in which to train and they wouldn't be opposed to settling there or they are in fact planning to settle there. Circumstantial evidence for this

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hypothesis can be found in the fact that American graduates fill all but 5 per cent of California's occupied residency positions while across the country they fill approximately only 75 per cent of occupied positions with FMG's filling the remainder. Thus, although one might anticipate as a result of geographic redistribution methods some residents settling in areas they might not otherwise have trained in, one could also reasonably anticipate that the correlation between site of training and practice location could be much lower under such measures as residents after completing training in a region could move to the region in which they want to practice and would have trained in, had a position originally been available.

This likelihood would also be enhanced insofar as a specialty redistribution of residents would reduce the competition for specialists across the country and render their moving and practicing in settings other than where they trained easier than at present.

The body of research on the correlation of location of residency training and practice location has also demonstrated that the sensitivity of practice location to residency training is of such a magnitude that manipulation of site of training in hope of influencing practice location



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would appear to be a weak policy instrument.

The third finding worth mentioning emanates from work being currently performed by Dr. Philip Held of Mathematica, Inc. as part of HEW's Health Insurance Study. In this work Dr. Held conducted a national telephone survey of physician offices designed to measure levels of access to medical care and "tightness" for physician services. Tentative data from this study shows that the differences between non-metropolitan areas and metropolitan areas were not found to be substantial. In addition, in examining access in HEW designated "physician shortage" rural areas, Dr. Held found evidence that access to physician services in these designated physician shortage areas was comparable to other non-metropolitan areas in the same region, which in turn were comparable to metropolitan areas.<sup>5</sup>

These findings lead him to state: "there does not appear to be a shortage of physicians, as defined in an economic sense, in HEW designated physician shortage counties. In fact, there is even some suggestion that, at least for the North Central region, there may even be a surplus of physicians relative to other non-metropolitan areas." Dr. Held's findings should not be taken to imply there are not problems in the

delivery of rural health services or that the political pressures generated by these problems are not real and intense. They do imply, however that the simple addition of physicians to these "shortage" counties would not measureably improve access to health services. Thus, as a researcher, I am concerned about the geographic redistribution measures insofar as I have reservations about the validity of the assumptions on which these measures are based.

As a physician and medical educator, I am also concerned about the wisdom of legislation which would appear to have as a goal the provision of services in allegedly underserved areas by large numbers of solo physicians. This concern is a complex one on which I will not dwell today. It is in part offset by knowledge of the scores of dedicated and excellent solo practitioners across the country but one fed by much research consistently suggesting problems in the delivery of quality medical care in a solo practice setting, regardless of specialty.

As a medical educator, I am also concerned about the possible propulsion by this legislation of residency positions away from centers of academic excellence. Academic medical centers as a whole have often



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been distinguished by their lack of leadership in the provision of community services or in fostering specialties as community medicine or primary care. From a purely educational perspective, however, the impact of a possible centripetal movement of residency positions from centers of academic excellence on the quality of medical decision making in various settings would have to be evaluated.

I would now like to return to my concerns about the geographic redistribution measures as an urban physician. S989 instructs the various councils, national and regional, to assess the service and educational needs within the various regions and to recommend appropriate numbers of residents by specialty for each region. I will surmise that it will not take the various councils long to realize that one in every six residents in general surgery and internal medicine in the United States is now training in the New York City metropolitan area, exclusive of New Jersey and Connecticut and the overwhelming majority of these are in New York City. I will further surmise that it will not be long before various regions, especially those perceived to be underserved, will be conferring among themselves as to how many of these New York

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City positions they would like to have. In view of New York City's current success in being able to convince Washington of its needs, it is not difficult to hypothesize that many of these regions might have their way.

This could become an especially bitter problem as regions could seek a given specialty position for different reasons: one in hope of filling a perceived shortage for that specialty in their region through the eventual settlement there by the occupying resident, while the other region sought the position to meet definitive service needs of its ghetto populations. The reality of the latter in the case of New York is particularly highlighted by the fact <sup>that</sup> in the Borough of Brooklyn

in 1974, residents provided services to 1,031,000 outpatient visits in the municipal hospitals of that borough <sup>alone</sup> and 500,000 of these visits were to an emergency room. The concern I have of cities like New York losing residents is further heightened by the fact that 93 per cent of residents in Brooklyn are foreign medical



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graduates, an unfortunate target of this legislation.\*

It is difficult for me to imagine how equitable decisions could be reached in the above instance of a conflict among regions for a given position. Thus, to the extent that the current legislation implies the possibility that at the margin a given region could be assigned a residency position only at the expense of another region, I see it as very divisive and potentially destructive of both the short run and long run public health of regions. Thus, a more equitable approach might be to call a moratorium of an overall growth of residency positions within regions, excluding primary care positions; attempt to bring the demand for and supply of residents within regions more in line with desired specialty manpower mix; and after that process has stabilized, carefully attempt to redistribute by region any specialty positions designated as excess by a given region. The threat of loss of residents from a region could relegate as the highest priority of a regional council the protection of its stock of residents and valuable opportunities for

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\*To my knowledge, no data exists demonstrating that foreign medical graduates, controlling for setting, deliver systematically poorer care than U.S. graduates.

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both intra-regional cooperation in specialty redistribution and eventual diminution of specialty positions lost. This emphasis on intra-regional redistribution could allow for the appropriately phased and evaluated substitution of other health personnel for residents and the development of collaborative arrangements between institutions to facilitate the referral of patients for specialty care, if not the wholesale assumption of responsibility of care of entire populations of patients.

The threat of massive dislocations in the residency market place from these control measures, if enacted, is mitigated by the fact that the rising number of medical school graduates over the next five years will swell the number of American graduates to within some reasonable percentage of current first year residency positions. Thus, rather than initially imposing a fixed ceiling on residency positions offered at 125 per cent of a graduating class or at any other arbitrary, however well-intentioned, figure, a moratorium on the growth of specialty positions, with some flexibility to allow for legitimate exceptions, might be an effective compromise and forestall what could be destructive inter-regional conflict. When appropriate data and mechanisms of substituting



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for residents have been worked out and a state of equilibrium reached, some relationship of residency positions to the number of American graduates could be suggested.

The complexity of the problems raised by the residency control measures is highlighted by the fact that any positions eliminated will have to be substituted for, if not by another resident then by other health manpower. The effective substitution of specialty residents on any large scale will require three additional ingredients: time, resources, and knowledge. These are in essence inseparable but I would like to dwell initially on the first two and then cover the last of these. It may well be that the New York City area should not have one in every six residents in internal medicine and general surgery in the United States or that other cities should not have the number of residents they do but the service requirements for residents in many of the hospitals of New York and other cities have evolved over a hundred years, often in response to urban migration and the relative abandonment of inner cities by primary care physicians. To suggest that appropriate manpower substitution for some of these residents could be achieved in two to three years would accordingly appear to be unrealistic [even assuming full knowledge

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of whom should be substituted and the most efficient way to do so].

Proponents of the control measures point to the substitution of residents by physician assistants (PAs), as we did in our study of residents, and by the National Health Services Corps. The facts remain that: (1) non-physician manpower <sup>such</sup> as PAs, even if they were to be available in sufficient numbers, would have to be trained and gradually introduced into a variety of settings and (2) it would appear to be a while before the National Health Services Corps could effectively substitute on a large scale in urban areas. Thus, I see the process of specialty substitution as one covering a 10-year time horizon in which incremental and carefully controlled substitutions could be effectuated and evaluated over time and pending successful outcomes, expanded.

The substitution of other manpower for residents will also cost money. Mount Sinai Hospital in New York has been using physician assistants in place of residents over the last three years. This experience has shown that 1.5 PAs must be substituted for each resident replaced to offset the fact that PAs don't work the double shift that residents usually do during a day's rotation. Accordingly, with PAs currently earning the same salary as the mean resident, such a substitution increases costs by 50 per cent. Replacement of residents with attending physicians



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would be even more costly, even with <sup>modest</sup> productivity gains. Were specialty residency positions to be cut back and the number of specialists to decrease, the opportunity costs to a physician working full time in a hospital could be expected to increase, as would then per force his salary, further increasing costs. In addition, it remains to be seen what incentives will be needed to attract such a pool of physicians.

Thus, the net result of the impression I would like to leave with you today is that the market for residents is an extremely complex one about which we have little solid knowledge, much speculation and much to learn before national manpower planning can be effectuated. It is in this light that the framers of S989 call for studies to shed light on this process. The SOSSUS study took five years, my own work has taken five years, the Health Insurance Study has been underway for three years. Accordingly, it seems unrealistic to set an apparent eighteen month deadline on the major study proposed in the bill. While some of the charges given to that study could be performed in eighteen months, some could not. This is especially true of the charges to develop methodologies where none now exist. Similarly the studies asked of the regional councils to assess service needs of and the educational

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components of programs in their regions are not simple ones and will require time and skilled manpower to perform and evaluate. I am also concerned about the personnel suggested for the various councils and the extent of their ability to interpret the limitations and advantages of the proposed studies and policy alternatives. Thus, I feel it would not be inappropriate to include on such councils health economists who could articulate the costs as well as the perceived benefits of various options as well as medical sociologists who could suggest, and thereby perhaps mollify, some of the possible negative externalities that might be anticipated in intervening in as complex an organization as a teaching hospital.

Questions remaining to be addressed entail the appropriate organization and repository of reform, if any, in the specialty redistribution of residency positions. The problem is an important one and would argue for reform consistent with the long run health of the American health system. Though proponents of Federal control minimize the extent of ongoing reform in the private sector, it is real. The private sector in American life, not limited by any means to health, has been famous for ferreting out any ripple of reform in its house and portraying it in the



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proportions of a tidal wave. This has cost the private sector credibility. In this issue, the same questions of credibility exist. As an independent observer, I can attest that there are definitive initiatives in the private sector working in the direction of a redistribution of specialists. Inquiries to a number of individuals in the New York area over the past few days have brought testimony of cut backs in the number of surgical residency positions offered and disaccreditation in some other programs. When Dr. Moore says he would like to see a 20 per cent cut back in American surgical residency positions, I believe him because it is in the long run economic interest of every American surgeon to have surgical residency positions cut back in the aggregate.\* Thus, my major concern is not that the surgeons will not go far enough in cutting back residency positions but that they could go too far and that in twenty years, we could be faced with a specialty shortage. Thus, because of possibilities like this, I am concerned about the existence of monopoly power

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\*Some surgeons might object to backs in specific programs as such cut backs could diminish coverage of surgical private patients and increase the work for the surgeons and therein probably also increase costs.

and would like to see some sort of flexible partnership arrangement where<sup>by</sup> the public could have a role in expressing its views about the appropriate specialty mix of physicians and have that voice carry some weight. I am opposed to the fixing of arbitrary ceilings, however, as I see no evidence that such ceilings guarantee more benefit than harm.

Another initiative in the private sector is that of the development of family practice - primary care residency programs. Starting with such small numbers, the growth of these programs, when expressed in terms of per cent increases per annum, appears astronomical. In fact, however, if the graduates of these programs are proven to be as efficacious in meeting health needs of America and the programs are as educationally sound as their proponents claim then there would appear to still be a fairly long way to go in that direction. I can see a fairly natural alliance between primary care physicians and surgeons developing that would foster that growth provided of course that primary care physicians stay out of the operating room and refer their surgical patients to surgeons, especially board certified surgeons. The primary care movement most directly conflicts with internal medicine where the delineation of



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the role of the primary care physician and the internist could be anticipated to continue to provide controversy. This is a controversy that could be expected to last for some time and it would appear worthwhile to have a public voice in its deliberation. Thus, it would appear appropriate that a flexible partnership arrangement be worked out between the private and public sector to develop appropriate knowledge and informed policy alternatives in this important area.

A recent article by Dr. Charles Edwards, former Assistant Secretary for Health excoriated the private sector in health for failure to develop responsible leadership to address the nation's health care problems.<sup>6</sup>

It should be noted<sup>that</sup> he had little favorable to add about the Federal government's role in addressing these problems either. The leadership of the private sector appears at this moment<sup>to be</sup> very concerned about the problem of specialty maldistribution. This concern in large part stems from anxiety over what might happen if the private sector did not act on this problem and the Federal government intervened in a massive way. Be that as it may, a plurality of forces within the private sector is converging on this issue from a variety of quadrants and appear to be advocating the same goals. I have already mentioned the surgeons and

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the family practitioners. An additional force is the rapidly rising rate of resident salaries. This force will move to array hospital administrators on the side of a gradual reduction of specialty residency positions, if they are not already so inclined. I would favor a relationship between these forces and the Federal government which allow the momentum in the private sector to continue in the direction it is going, which evaluated the progress and goals of that momentum, and suggested alternative actions if goals were not being met. If the private sector were not to persevere in its current initiatives and not to provide evidence why such perseverance was contrary to the public good, then it would appear appropriate for the Federal government to take the initiative and in an enlightened, knowledgeable and incremental way to attempt to correct the problem.

Before a new drug can be introduced to the American public it must undergo extensive clinical trials to show its clinical efficacy, i.e. that it works, and extensive toxicologic studies to determine the extent to which it might cause harm. These screening procedures are backed by Federal law. In the area of health service delivery and manpower education, however, it is not unusual for both the public and the private sector to



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suggest wholesale alterations in the methods of delivery or education without any controlled trials to ascertain that they will work or any studies to ascertain potential harm they might do - I am thinking of the recent "abolition" of the internship and the proposals for certification reform initiated by the National Board of Medical Examiners. The proposal for residency specialty redistribution is one that cuts to the very heart of graduate medical education and the delivery of health services and yet we have no proposals for limited trials to see if it could work in certain areas and no measures of its potential costs and harm. The area is a very complex one and one that should be approached with a fair amount of humility on all sides. It should be approached with the appropriate resources, time horizon, and flexibility to ensure whatever is done is in reality in the long term interest of the health of the American people and consistent with the national goal of availability of high quality health care to all Americans. The proponents of the resident control legislation are responding to real and important political pressures and it would appear appropriate for the public and private sectors to put their heads together and come up with a valid plan to cope with the problems generating these pressures.

I would be remiss if I did not include one other item in my testimony.

A major ingredient required in any successful approach to a correction of our problems of specialty maldistribution is the acquisition of new knowledge. Critical ingredients in the success of medical research in this country have been the elements of peer review and competition for available funds. It is with concern that I see yet again further proposed legislation designating an unnamed entity the sole recipient of funds to perform extensive research on problems of critical national importance - problems that some other researchers have devoted the bulk of their professional careers to pursuing. This problem becomes especially critical when the sum of money called for in this proposed legislation is 10 million dollars and the sum of new money available from the National Center for Health Services Research through grants to all of the independent investigators in the United States is 2 million dollars. I am concerned about the growth of monopoly in the health services research community and simultaneously the survival of pluralism and creativity, especially at a time when health care costs continue to grow at a rate of double digit inflation.



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**SURGICAL WORK LOADS IN A  
COMMUNITY PRACTICE**

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Reprinted from

**SURGERY**

St. Louis

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Vol. 71, No. 3, Pages 315-327, March, 1972

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(Printed in the U. S. A.)

# Surgical work loads in a community practice

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Many physicians and laymen believe that the only solution to the alleged "doctor shortage" is a massive increase in the number of physicians<sup>5, 7, 8</sup>; other observers, however, have been calling attention to the underutilization of physicians in those tasks which long years of training have equipped them to perform.<sup>10, 20, 22</sup> With the social cost of college plus medical school now well in excess of \$100,000 per student, it is essential that the question of effective and efficient use of medical manpower receive careful study.

One area of medicine which has long been suspected of harboring underutilization is

surgery. According to Longmire,<sup>13</sup> "... in each community in our country there are a few surgeons who are doing all or more than they humanly can do. Many, though, are working at a pace far below their capacity and this is a tremendous waste of highly skilled talent." Bunker<sup>8</sup> has hypothesized that in the United States there may be too many surgeons for the needs of the population and has suggested that this may lead to unnecessary surgery. Fuchs,<sup>9</sup> using aggregate national data, has calculated that even if all operations were done by surgical specialists, their average work load would be below five operations per week, which would fall far below capacity. Maloney<sup>14</sup> and Owens<sup>17</sup> have also presented evidence of work loads in this range—Maloney for university surgeons and Owens for general surgeons. Strickler<sup>21</sup> and Phillips<sup>18</sup> have argued the other side of the issue: that there is adequate work for surgeons and even a need for more in certain areas. Riley and associates<sup>19</sup> provide indirect evidence that such a need may exist.

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This investigation was supported by United States Public Health Service Research Grant No. 2 PO1 HS 00451-04 from the National Center for Health Services Research and Development.

This study has not yet received full National Bureau of Economic Research review.

Accepted for publication Sept. 21, 1971.

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There have been very few attempts to measure the surgical work load of individual surgeons or of populations of surgeons,<sup>11, 15, 18</sup> and even fewer attempts to carefully distinguish among different types of surgeons and different types of procedures. The current study is an attempt to elicit direct evidence about the alleged underutilization of surgeons by quantifying the in-hospital surgical work load of a population of general surgeons. We first develop a methodology for aggregating different types of surgical procedures and then apply it to a population of general surgeons, in private practice, in a suburban community in the New York metropolitan area. No attempt is made in this present study to measure the nonoperative work loads of these surgeons or to appraise the quality of care they deliver.

## METHODS

**The problem of aggregation.** A major problem in measuring surgical work loads is the development of a set of weights to be applied to different procedures so that a meaningful summary index can be calculated. This is a common problem in economics and the customary solution is to use "price weights." A similar approach could be used for surgical procedures by the application of a relative value scale, such as that developed by the California Medical Association in the 1950's<sup>6</sup> and subsequently adopted by a number of medical societies.<sup>4</sup>

The California Medical Association established the relative value scale to assist practitioners in arriving at equitable fees. The Association asked practitioners to list their customary fee for a multitude of procedures. After extreme values were discarded, median and modal fees were determined. The median values were then multiplied by a conversion factor such that a small procedure (puncture aspiration of abscess, subsequent) was given unit value and all other procedures expressed as multiples of it.

A surgical relative fee value is intended to encompass all the work associated with a procedure: pre- and postoperative care as well as the actual operation. The question

arises, however, whether the relative fees are systematically related to the work involved in different procedures. To answer this question, the following data were collected for 24 general surgical procedures (of graduated complexity) and three miscellaneous categories. These latter categories were designed to encompass all general surgical procedures not included in the previous 24 and were classified as being of minimal (Class I), moderate (Class II), or considerable complexity (Class III).

**1. Operating room (OR) time.** The operating room log book of a major New York teaching hospital was examined to obtain the average OR time for each of the 27 categories. OR time, defined as the time from entrance of the patient to the operating room to his leaving that room, was recorded directly from the log. Data were collected for 20 consecutive operations in each category. For the miscellaneous categories, and the unilateral inguinal herniorrhaphy category, 50 operations were recorded. These additional data were collected because of the diversity within the miscellaneous categories and because the herniorrhaphy category is used as an index in our weighting system. The mean for each category was calculated.

**2. Length of stay.** Total length of hospital stay for each patient whose OR time was recorded was extracted from the hospital discharge record. The mean for each category was calculated.

**3. Relative fees.** The "1960 Relative Value Studies" of the California Medical Association<sup>6</sup> was the source of the relative fee value of each procedure.

**4. Other data.** It was hypothesized that the care of a patient undergoing an operation with a high mortality risk would entail more work than an operation with a lower risk. The lack of comprehensive, comparable data on operative mortality rates, however, precluded the inclusion of this variable in the subsequent analysis.

Table I and Fig. 1 reveal an extremely high correlation between the relative fee and OR time ( $r = 0.97$ ). There is a moderate correlation between relative fee and length

**Table I.** *Relative fee, operating room (OR) time, and length of stay for 24 surgical procedures and 3 miscellaneous categories*

| Procedure                                   | Relative fee | OR time (min.) | Length of stay (days) | Hernia equivalents |         |                |
|---|--------------|----------------|-----------------------|--------------------|---------|----------------|
|   |              |                |                       | Relative fee       | OR time | Length of stay |
| 1. Breast biopsy                            | 15           | 50.2           | 3.7                   | 0.43               | 0.57    | 0.44           |
| 2. Rectal fistulectomy                      | 22           | 41.8           | 7.7                   | 0.63               | 0.47    | 0.92           |
| 3. Hemorrhoidectomy                         | 30           | 39.0           | 5.7                   | 0.86               | 0.44    | 0.68           |
| 4. Pilonidal cyst, excision                 | 30           | 50.8           | 6.6                   | 0.86               | 0.57    | 0.78           |
| 5. Inguinal herniorrhaphy, unilateral adult | 35           | 88.4           | 8.4                   | 1.00               | 1.00    | 1.00           |
| 6. Phlebectomy, unilateral                  | 40           | 74.8           | 1.6                   | 1.14               | 0.84    | 0.19           |
| 7. Appendectomy                             | 40           | 79.5           | 11.3                  | 1.14               | 0.90    | 1.34           |
| 8. Exploratory laparotomy                   | 40           | 93.0           | 30.2                  | 1.14               | 1.05    | 3.60           |
| 9. Colostomy                                | 45.8         | 87.5           | 41.6                  | 1.31               | 0.99    | 4.95           |
| 10. Amputation of leg                       | 52.5         | 74.8           | 71.4                  | 1.50               | 0.84    | 8.50           |
| 11. Inguinal herniorrhaphy, bilateral adult | 52.5         | 117.9          | 8.5                   | 1.50               | 1.33    | 1.01           |
| 12. Thyroidectomy                           | 55           | 120.0          | 6.4                   | 1.57               | 1.36    | 0.76           |
| 13. Bilateral phlebectomy                   | 60           | 125.5          | 5.2                   | 1.71               | 1.42    | 0.62           |
| 14. Splenectomy                             | 60           | 155.8          | 25.1                  | 1.71               | 1.76    | 2.99           |
| 15. Cholecystectomy                         | 62.5         | 146.5          | 19.8                  | 1.78               | 1.66    | 2.36           |
| 16. Vagotomy and pyloroplasty               | 70           | 170.8          | 12.2                  | 2.00               | 1.93    | 1.45           |
| 17. Radical mastectomy                      | 70           | 179.8          | 14.2                  | 2.00               | 2.03    | 1.69           |
| 18. Gastroenterostomy and vagotomy          | 75           | 176.0          | 20.1                  | 2.14               | 1.99    | 2.39           |
| 19. Gastrectomy                             | 80           | 214.0          | 26.6                  | 2.28               | 2.42    | 3.17           |
| 20. Colectomy                               | 81.5         | 198.8          | 27.2                  | 2.33               | 2.25    | 3.24           |
| 21. Lobectomy                               | 100          | 200.0          | 26.6                  | 2.86               | 2.26    | 3.17           |
| 22. Abdominal-perineal resection            | 100          | 254.5          | 26.0                  | 2.86               | 2.88    | 3.10           |
| 23. Peripheral vascular surgery             | 120          | 216.2          | 29.0                  | 3.43               | 2.44    | 3.45           |
| 24. Aortic-mitral valve replacement         | 200          | 423.8          | 35.7                  | 5.71               | 4.79    | 4.25           |
| 25. Class I                                 | 23.7         | 49.4           | 12.1                  | 0.68               | 0.56    | 1.44           |
| 26. Class II                                | 56.5         | 125.4          | 22.6                  | 1.61               | 1.42    | 2.69           |
| 27. Class III                               | 141.4        | 368.1          | 28.9                  | 4.04               | 4.16    | 3.44           |

of stay ( $r = 0.40$ ). From a regression of relative fee on OR time, the elasticity at the mean values was found to be 0.95, indicating an increase of 0.95 percent in relative fee for each 1 percent increase in OR time. The addition of length of stay to the regression equation has very little effect on either the OR time regression coefficient or the total explanatory power.

This evidence indicates that the relative fee value of a given operation is, in fact, a good reflection of the work associated with the procedure and would serve as a satisfactory weighting scale for comparing different procedures. To simplify our weighting scale, the relative fee value for each category was divided by the relative fee value for an adult unilateral inguinal herniorrhaphy (35.0). The resulting quotient expresses the

value of each category as a multiple of a herniorrhaphy (see Table I) and carries the label, "hernia equivalents." Thus, a radical mastectomy with a relative value of 70.0, 2.00 times a herniorrhaphy, is equal to 2.00 hernia equivalents. The unilateral adult inguinal herniorrhaphy category was chosen as the index in our weighting system for several reasons. The procedure is among the most common performed by general surgeons; it is a fairly standard procedure varying little from surgeon to surgeon, or patient to patient; it is in the middle range of complexity; and it holds a position of special importance in the early operative training of a general surgeon.

This weighting system was then applied to a population of general surgeons to measure their surgical work loads and the rela-

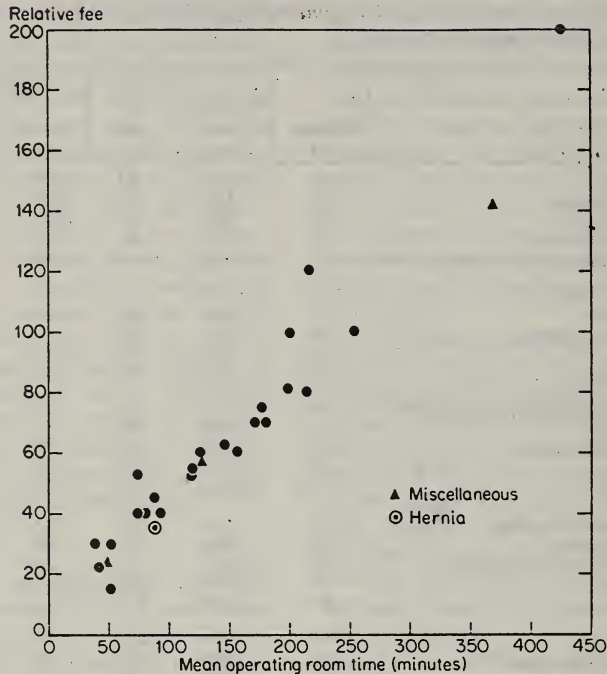


Fig. 1. Mean operating room time and relative fee: 27 operative categories.

tive complexity of the procedures they performed.

The surgical work load of a population of general surgeons. The study population consists of 19 general surgeons in private practice who constitute the entire general surgical staff of a medium-sized, voluntary, nonteaching hospital in a suburban community in the New York metropolitan area. These 19 designated themselves as general surgeons. This designation was confirmed by the New York State Medical Directory,<sup>16</sup> the Directory of Medical Specialists,<sup>1</sup> and existing hospital appointments. Two surgeons at this hospital who concentrated on plastic surgery were not included in the study population; those performing thoracic surgery and colon and rectal surgery were included. The plastic surgeons were not included in the study because their specialized case loads differed qualitatively from the case loads of the general surgeons and did not lend themselves as readily to analysis by our weighting

scheme. The case loads of those performing thoracic and colon and rectal surgery entailed what is traditionally interpreted to be general surgery, and they were included in the study.

A listing of all operating room surgical procedures performed by these surgeons in a recent calendar year was obtained from the index hospital and from seven additional institutions to calculate the surgeons' complete hospital surgical work load. Weights were assigned to each procedure according to the relative fee scale<sup>6</sup> and expressed in terms of hernia equivalents. Weekly work loads were calculated on the basis of a 48 week year.

The first secondary procedure performed during each operation was recorded and arbitrarily assigned a relative fee value equal to 20 percent of its value as an independent procedure. This 20 percent value was felt to be a reasonable approximation of the additional work entailed in an operation with a secondary procedure. The data were not



Table II. Annual number of operations and hernia equivalents (H.E.) by surgeon

| Surgeon        | Annual<br>No. of<br>operations | No. of<br>operations<br>with<br>secondary<br>procedure | Annual<br>No. of<br>H.E.* | Weekly<br>No. of<br>H.E.† | Mean<br>(H.E.*)<br>per<br>operation | S.D.<br>of<br>mean | Coefficient<br>of<br>variation |
|----------------|--------------------------------|--|---------------------------|---------------------------|-------------------------------------|--------------------|--------------------------------|
| A              | 569                            | 131  | 625                       | 13.0                      | 1.10                                | 0.63               | 56.9                           |
| B              | 562                            | 128  | 460                       | 9.6                       | 0.82                                | 0.59               | 72.0                           |
| C              | 451                            | 52   | 353                       | 7.4                       | 0.78                                | 0.57               | 73.4                           |
| D              | 275                            | 48   | 296                       | 6.2                       | 1.08                                | 0.65               | 60.0                           |
| E              | 300                            | 67   | 278                       | 5.8                       | 0.93                                | 0.65               | 69.7                           |
| F              | 274                            | 46   | 266                       | 5.5                       | 0.97                                | 0.57               | 58.6                           |
| G              | 249                            | 46   | 245                       | 5.1                       | 0.98                                | 0.62               | 63.0                           |
| H              | 177                            | 56   | 191                       | 4.0                       | 1.08                                | 0.70               | 64.6                           |
| I              | 178                            | 21   | 176                       | 3.7                       | 0.99                                | 0.68               | 68.5                           |
| J              | 121                            | 22   | 147                       | 3.1                       | 1.22                                | 0.63               | 52.2                           |
| K              | 165                            | 25   | 143                       | 3.0                       | 0.87                                | 0.63               | 72.6                           |
| L              | 139                            | 21   | 129                       | 2.7                       | 0.92                                | 0.63               | 68.4                           |
| M              | 133                            | 18   | 122                       | 2.5                       | 0.92                                | 0.61               | 66.0                           |
| N              | 121                            | 51   | 116                       | 2.4                       | 0.96                                | 0.71               | 73.5                           |
| O              | 127                            | 19   | 111                       | 2.3                       | 0.88                                | 0.55               | 62.8                           |
| P              | 136                            | 83   | 111                       | 2.3                       | 0.82                                | 0.67               | 81.3                           |
| Q              | 98                             | 23   | 92                        | 1.9                       | 0.94                                | 0.62               | 66.7                           |
| R              | 47                             | 8  | 48                        | 1.0                       | 1.01                                | 0.73               | 72.4                           |
| S              | 56                             | 35   | 43                        | 0.9                       | .77                                 | 0.33               | 42.8                           |
| Total          | 4,178                          | 900  | 3,952                     |                           |                                     |                    |                                |
| Mean           | 200                            | 47   | 208                       | 4.3                       | 0.95                                |                    |                                |
| Median         | 165                            | 46   | 147                       | 3.1                       | 0.94                                |                    |                                |
| Weighted mean‡ |                                |  |                           |                           | 0.96                                |                    |                                |

\*Primaries + 0.2 secondary procedures.

†Based on a 48 week year.

‡Weight = annual number of H.E.

sensitive to the magnitude of this arbitrary approximation. The relative fee value for this secondary procedure was added to that for the primary procedure to arrive at a total for the operation. Further secondaries were not included.

Data were obtained on the amount of first assisting at operation by these surgeons. Inspection of the data revealed that in the overwhelming majority of cases first assisting by a general surgeon was not medically indicated and this work was not included in the calculation of surgical work load.<sup>12</sup>

## RESULTS

The 19 general surgeons performed 4,178 operations in the calendar year, a work load that was probably at least as large as that of the national average and substantially above the average for New York State.<sup>9</sup> These operations, including 900 secondary

procedures, amounted to 3,952 hernia equivalents (H.E.). The mean H.E. per operation was 0.95, and the median operation had a value of 0.94 H.E. Thus, more than half the operations were less complex than an adult inguinal herniorrhaphy. Variations in complexity are considered after an analysis of variations in work loads.

Variations in work loads. Table II and Fig. 2 show that there is very large variation in work loads among the 19 surgeons. The busiest surgeon performed 13.0 H.E. per week, the mean weekly work load was 4.3 H.E., and the median was 3.1 H.E. per week. Thus half of this population of general surgeons performed less operative work per week than the equivalent of 3.1 inguinal herniorrhaphies. The work was distributed among the surgeons in such a way that the bottom 50 percent of the surgeons performed 25 percent of the work, the upper 25 percent

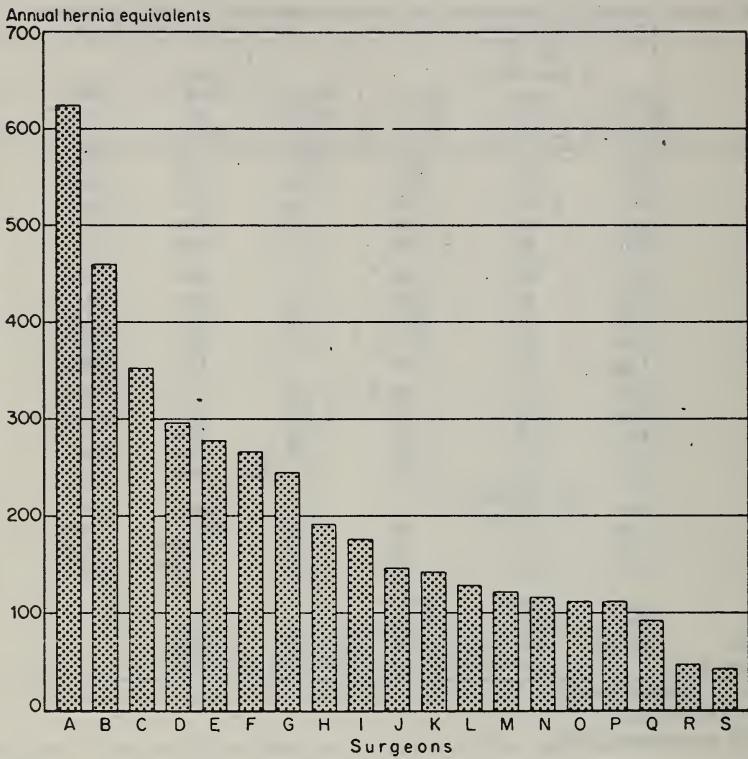


Fig. 2. Annual hernia equivalents, by surgeon.

performed 50 percent of the work, and the upper 10 percent performed 25 percent of the work.

The importance of weighting operations is demonstrated by comparisons between surgeons. For instance, surgeons A and B performed almost exactly the same number of operations but surgeon A's work load measured in hernia equivalents was more than one third greater. Surgeon C performed 64 percent more operations than did surgeon D but his work load was only 19 percent greater.

What surgeon characteristics are associated with different work loads? Table III compares groups of surgeons classified by professional accreditation, number of hospital affiliations, and age.

Six surgeons were certified by the American Board of Surgery, five were Fellows of

the American College of Surgery (approved residency training without Board Certification), six were Fellows of the International College of Surgery (variable surgical training), and two had no evidence of similar accreditation. No attempt was made to further analyze accreditation in terms of number of years of residency. Board Certified surgeons have a mean weekly work load of 6.0 H.E., two thirds greater than non-Board Certified surgeons with 3.6 H.E. per week. When non-Board Certified surgeons are categorized by their respective subgroups, it appears that the most productive group of all is nonaccredited surgeons. The two nonaccredited surgeons are performing three times more H.E. than the FICS surgeons, more than two times more than the FACS surgeons, and 42 percent more than the Board Certified surgeons.

**Table III.** Work loads of surgeons classified by professional accreditation, number of affiliations, and age

| <i>Classes</i>                     | <i>Annual<br/>No. of<br/>H.E.<br/>per surgeon</i> | <i>S.D.</i> | <i>Weekly<br/>No. of<br/>H.E.</i> | <i>Mean<br/>H.E.<br/>per<br/>operation<br/>per surgeon</i> | <i>S.D.<br/>of<br/>mean</i> |
|------------------------------------|---|-------------|-----------------------------------|--|-----------------------------|
| <i>Professional accreditation:</i> |   |             |                                   |  |                             |
| Board certified (n=6)              | 286   | 177.6       | 6.0                               | 0.98   | 0.10                        |
| Non-Board certified (n=13)         | 172   | 123.2       | 3.6                               | 0.94   | 0.12                        |
| FACS (n=5)                         | 148   | 90.8        | 3.1                               | 1.03   | 0.12                        |
| FICS (n=6)                         | 114   | 45.2        | 2.4                               | 0.90   | 0.08                        |
| None (n=2)                         | 406   | 75.7        | 8.4                               | 0.80   | 0.03                        |
| <i>Number of affiliations:</i>     |   |             |                                   |  |                             |
| 2 (n=4)                            | 156   | 135.8       | 3.2                               | 0.92   | 0.10                        |
| 3 (n=5)                            | 143   | 37.4        | 3.0                               | 0.96   | 0.08                        |
| 4 (n=5)                            | 211   | 167.1       | 4.4                               | 0.94   | 0.19                        |
| ≥5 (n=5)                           | 312   | 183.7       | 6.5                               | 0.97   | 0.08                        |
| <i>Surgeon age:</i>                |   |             |                                   |  |                             |
| ≥65 (n=2)                          | 95  | 73.5        | 2.0                               | 0.99   | 0.31                        |
| 55-64 (n=7)                        | 156   | 65.4        | 3.2                               | 0.95   | 0.07                        |
| 45-54 (n=5)                        | 229   | 164.8       | 4.8                               | 0.94   | 0.07                        |
| 35-44 (n=5)                        | 305   | 200.0       | 6.4                               | 0.96   | 0.14                        |

Owing most likely to the small sample size (2) of the nonaccredited surgeons, none of the differences between this group and the others are significant at five percent by the Mann-Whitney U test.

The difference in work loads between the Board Certified surgeons and the FICS surgeons is significant at the five percent level.

The volume of surgical work load was inversely related to age of the surgeon. Surgeons aged 35 to 44 years performed twice as much surgery as those aged 55 to 64 and more than three times as much as those over 65. These differences, however, are not statistically significant at the five percent level.

The number of hospital affiliations of a surgeon was positively correlated with his work load. Surgeons with five or more affiliations did twice as much work as those with two or three affiliations, and 50 percent more than those with four. Of these differences only that between those surgeons with three and those with five or more affiliations was significant at five percent.

To determine the net influence on annual work load of each of the above variables (accreditation, age, and affiliations), a mul-

tiple regression technique was employed. The estimated equation was

$$\ln Y = 14.9 + 1.29 \ln X_1 - 2.83 \ln X_2 - 0.809X_3$$

(0.51)                      (1.00)                      (0.53)

$\bar{R}^2 = 0.39$  (standard errors of the regression coefficients in parentheses). All variables except Board Certification are expressed in natural logarithms.  $Y$  = annual H.E.;  $X_1$  = number of affiliations;  $X_2$  = surgeon's age;  $X_3$  = dummy variable for Board Certification.

The results of this equation are for the most part consistent with the previous findings. The coefficients of affiliation and age are significant at the one percent level. In a double log equation of this kind, the coefficients may be interpreted as elasticities. Thus a one percent increase in a surgeon's age is associated with a 2.8 percent decrease in his annual work load, and a one percent increase in the number of affiliations is associated with a 1.3 percent increase in work load. The coefficient of board certification is not significant at the five percent level and the negative sign is unexpected. This may be the result of a negative correlation between age and certification.



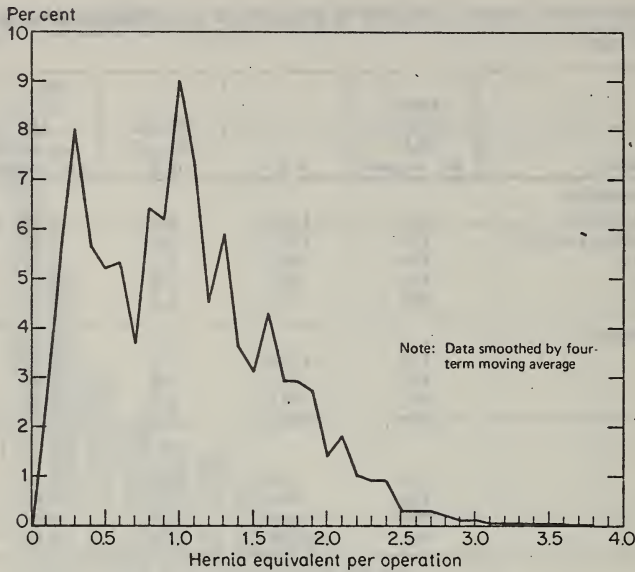


Fig. 3. Distribution of all operations by complexity.

**Variations in complexity of operations.** Although a few surgeons had a mean H.E. per operation substantially above or below the mean for the group, most recorded very similar values for their average operation and for the standard deviation of the mean (Table II). The mean operative value for 11 of the 19 surgeons deviated from the population mean by less than 0.10 H.E.

It should be noted that the distribution of operations by degree of complexity departs substantially from a normal distribution for the population as a whole as well as for individual surgeons. As shown in Fig. 3, the distribution is multi-peaked and skewed to the right. Less than 1.5 percent of the procedures are valued at greater than 2.5 H.E., the equivalent of a colectomy. These larger procedures were scattered among surgeons of all degrees of accreditation. Of the 15 surgeons who performed operations of greater complexity than 2.5 H.E., 12 did fewer than 6 in the year. The existence of this small number of complex procedures scattered in this population raises questions for surgical training and quality of care that will be discussed in the next section.

Table III shows that the mean H.E. per operation did not vary much with professional accreditation, number of affiliations, or surgeon's age. Fig. 4 shows some differences in the over-all distribution between Board Certified and non-Board Certified general surgeons. The former have a smaller fraction of their operations in the range of 0.2 to 0.7 H.E. and slightly more from 0.9 to 2.0 H.E. These distributions are significantly different at the 1 percent level by the Kolmogorov-Smirnov test. The distribution of procedures greater than 2.0 H.E. among the two groups, however, is almost identical, with the tail of the curve for the Board Certified surgeons being slightly longer.

The data generated about this population of general surgeons permit comparisons of some properties of the surgeons' work in the various hospitals. Table IV shows that the mean H.E. per operation is slightly larger (1.00 H.E.) in acute hospitals with less than 100 beds than in acute hospitals with 100 to 200 beds (0.92 H.E.). This difference in size of operations by hospital is confirmed in Fig. 5, which shows the percentage distribution of operations by hospital size. The hospitals

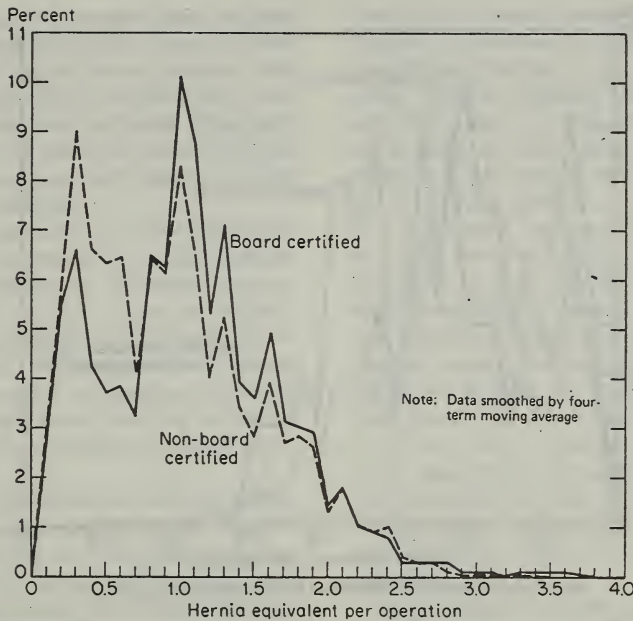


Fig. 4. Distribution of operations by complexity: Board certified and non-Board certified surgeons.

Table IV. Complexity of operations by 19 surgeons in hospitals classified by size and control

| Classes                  | Annual<br>No. of H.E.*<br>per<br>hospital | S.D.   | Mean<br>H.E.<br>per<br>operation<br>per hospital | S.D.<br>of mean |
|--------------------------|---|--------|--|-----------------|
| <i>Number of beds†:</i>  |   |        |  |                 |
| ≤ 100 (n=2)              | 65  | 72.12  | 1.00   | 0.25            |
| 100 - 200 (n=4)          | 888                                       | 665.57 | 0.92   | 0.06            |
| <i>Type of hospital:</i> |   |        |  |                 |
| Proprietary (n=2)        | 518                                       | 568.51 | 1.02   | 0.23            |
| Voluntary (n=4)          | 661                                       | 792.91 | 0.91   | 0.07            |
| Government (n=2)‡        | 134                                       | 98.99  | 1.04   | 0.20            |

\*Primaries + 0.2 secondary procedures.

†Acute hospitals only.

‡Nonacute hospitals.

of less than 100 beds had less surgery below 1 H.E. and more surgery in the more complex range of 1.5 to 2.5 H.E. than the larger hospitals. These differences are significantly different at the 1 percent level by the Kolmogorov-Smirnov test. Of note is the fact that no surgery of complexity greater than a

colectomy was performed in the smaller hospitals.

Table IV shows that the two nonacute government hospitals have a mean H.E. per operation slightly greater than the two acute proprietary hospitals and the four acute voluntary hospitals. The percentage distributions

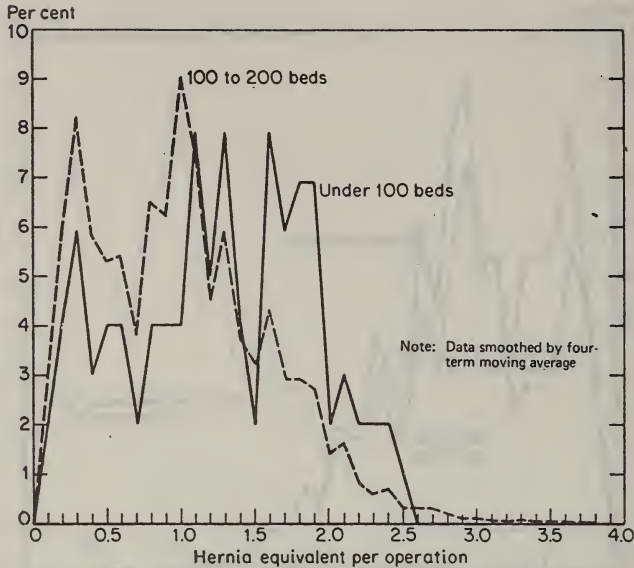


Fig. 5. Distribution of operations by complexity: hospital size.

of operations by hospital type (not shown) confirm the finding that the most complex surgery is performed in the government hospitals but show that the proprietary hospitals are doing more complex surgery than the voluntary. These differences are significant at the one percent level by the Kolmogorov-Smirnov test.

### DISCUSSION

This study describes and analyzes the annual in-hospital surgical work loads of 19 general surgeons practicing in a suburban community in the New York metropolitan area. The mean weekly work load of 4.3 H.E. and especially the median value of 3.1 H.E. suggest substantial underutilization of costly and highly specialized medical skills.

The problem of determining underutilization of surgeons is complicated by the lack of an adequate standard of what comprises a well-balanced, productive surgical work load. During this study, the authors asked many surgeons in different practice settings what they considered a desirable surgical work load. Consistently, the surgeons stipulated 10 H.E. per week. They felt that a work

load of this magnitude would provide an adequate technical challenge and still leave time for continuing education and leisure. Phillips<sup>18</sup> data support this standard. Assuming the mean operation in his work load had the same H.E. value as in our population, Phillips and colleagues averaged 10.3 H.E. per week. He felt this work load fulfilled his skills and still left time for other interests.

The fact that a work load of 10 H.E. per week is not an unrealistic burden is further suggested by the work of Masson and colleagues,<sup>15</sup> who measured the work loads of two productive surgeons and concluded a standard of 15 H.E. per week still left time for substantial extramural activities.

In the population studied, only one surgeon operated more than 10 H.E. per week, and only one other approximated that value. The mean work load of the population is less than one-half the standard and the median about a third.

Other findings of interest in this study are: (1) Though Board Certified surgeons as a whole had a larger work load than noncertified surgeons, their work loads were smaller than those of the nonaccredited surgeons.



(2) Surgeons in the youngest age group had the largest work loads. (3) Board Certified surgeons had slightly more complex work loads than non-Board Certified, but complex procedures were scattered throughout the population of general surgeons. (4) More complex surgery was being performed in the smaller acute hospitals.

One must be careful not to overgeneralize the results of this study. It was performed on only one population of 19 general surgeons in a state known to have a general surgeon/population ratio 64 percent<sup>23</sup> in excess of the national norm. Before generalized conclusions about surgical underutilization can be drawn, further research must be performed on larger and geographically stratified populations.

This study also focuses on only the utilization of a surgeon's operating time. To draw conclusions about the utilization of a surgeon's total professional time would be inappropriate. To answer the question of how surgeons are spending their nonoperative time, the authors of this study are planning time studies of members of this population and survey studies of this and larger groups of surgeons in various practice settings.

This population of surgeons is the first to have been so extensively studied. The results provide impressive support for the suggestive findings of other investigators. The similarity to Fuchs<sup>9</sup> findings has already been mentioned. Owens<sup>17</sup> found that surgical specialists were performing one to four major operations per week. Maloney<sup>14</sup> found that university geographic full-time surgeons were operating 3.5 times a week, whereas strict full-time surgeons reported 2.2 operations per week. Masson and associates<sup>15</sup> found a population of general surgeons performing 3.8 operations per week. Subjective evidence of underutilization from surgeons themselves was reported by both Owens and Maloney. In the *Medical Economics* survey Owens stated, "most (surgical specialists) felt they could do more—typically, at least five more major operations a week." Maloney stated "it was an almost universal complaint among strict full-time surgeons that they had inade-

quate clinical material to maintain their professional competence." Wolfe and colleagues,<sup>24</sup> in their study of a Saskatchewan group practice, reported the general surgeon there, earning a very good living, "estimated that he could have handled three times as much work as he actually carried out." That the problem of underutilization is not universal, however, is illustrated by the work loads of Phillips<sup>18</sup> and the data generated by Riley and co-workers.<sup>19</sup> The latter showed that 65 percent of rural family practitioners in upstate New York performed hospital surgery and concluded: "There is significant demand for surgical and obstetrical practice in the rural region of New York State, and at present a large portion of the responsibility for providing these services lies with the family doctor." It appears that geographic distribution of general surgeons may be a factor in determining underutilization.

This investigation raises a number of questions for study for those concerned with the delivery of surgical care in the United States.

1. Might there not be widespread underutilization of general surgeons? Is underutilization a function purely of oversupply or does it stem in part from uneven geographic distribution?

2. Does underutilization of general surgeons jeopardize quality of care? Do surgical skills atrophy with underutilization? This problem of quality of care is highlighted by a surgeon with a low work load performing one radical mastectomy or portacaval shunt a year.

3. Is a surgeon with a low work load more susceptible to the temptation to operate in equivocal therapeutic situations and run the risk of unnecessary surgery?

4. Might not surgical residency programs be training too many general surgeons and, in addition, overtraining these general surgeons for the job they will do (mean operation, 0.95 H.E.)? Taylor<sup>22</sup> has stressed the need for residency reform to prepare for "the job to be done," and Longmire<sup>13</sup> has actually called for a reduction of 100 in the number of senior residency positions offered.

5. Since complex procedures were scattered in small numbers throughout the population of general surgeons, could the quality of surgical care delivered by this and other populations of surgeons be improved by a pattern of regional organization in which all complex surgery would be referred to one hospital, and performed by highly trained, full-time surgeons?

This study indicates that a group of general surgeons is underutilizing highly trained skills. Other data suggest that this is not an atypical situation. One must be careful not to misinterpret this study. It is not a call for more surgery and does not mean to imply that high work loads per se mean quality surgery. Academic surgery has for decades stressed that surgical intervention is only one in an armamentarium of therapies available to the surgeon. It has advocated operating only when precise indications are present and has stressed the importance of preoperative diagnosis and postoperative care. This advocacy has gone far to raise the level of surgical care in this country.

From this study, we believe there is a need for surgical services in the United States to be further investigated and rationalized. The American Surgical Association and the American College of Surgeons are now beginning to look at the problems of the delivery of surgical services in the United States with the hope of raising the accessibility and quality of surgical care available to all.<sup>2</sup> It is to the credit of the specialty of surgery that these efforts are being undertaken, and it is to be hoped they will add credence to Bunker's<sup>3</sup> point that an "important corrective force . . . (in improving the delivery of surgical services) . . . is the growth and maturity of surgery as a specialty."

This study focused on the field of general surgery. The methodology developed for this study is applicable to other specialties, and it is hoped that it will be applied. Other surgical specialties and some medical specialties may also evidence under- and inefficient utilization of valuable skills.

We are indebted to Drs. Kurt Deuschle, Charles Goodrich, David Lyall, and Robert Brown and

Mr. Arthur Selvan for help in completing this study. We also thank Ms. Carol Breckner and Ms. Phyllis Goldberg for research assistance, Mr. Irving Forman for technical assistance, and Ms. Maria Perides for secretarial assistance. We are also indebted to many others who must remain anonymous.

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## SPECIAL ARTICLE

## OPERATIVE WORK LOADS IN ONE HOSPITAL'S GENERAL SURGICAL RESIDENCY PROGRAM

EDWARD F. X. HUGHES, M.D., M.P.H., EUGENE M. LEWIS, B.A., AND ELIZABETH H. RAND, M.A.

**Abstract** Residents training in medical specialties represent an expanding, expensive and largely unstudied pool of medical manpower. This study applies quantification technics to the operative work loads of 41 general surgical residents in a university-affiliated municipal hospital. Operative work loads of 0.7 to 3.0 hernia equivalents per week and mean operative complexities of 1.04 to 1.63 hernia equivalents over the first four years of training suggest underutilization of operative and possibly nonoperative skills. Chief residents

performed 8.2 hernia equivalents per week, almost equal to the work loads of all other residents combined. In the aggregate, the residents performed surgery 21 per cent more complex than a population of 19 general surgeons practicing in a neighboring community. The results suggest that efficiencies may be gained through a diminution in the number of residents and in the duration of training, and through more effective tailoring of training to the job to be done in practice. (N Engl J Med 289:660-666, 1973)

THE current controversy about a doctor shortage in the United States and the expensive policy alternatives suggested to remedy this alleged shortage invite serious investigation of the extent to which the nation is efficiently utilizing its present supply of physicians.<sup>1,2</sup> Such analysis is warranted not only for practicing physicians but also for physicians in residency programs. In 1971-72, there were 42,512 residents training in all specialties in the United States, one for every eight physicians, and an increase of 143 per cent in the past 20 years.<sup>3,4</sup> This number is to be only further increased by programs designed to augment the number of physicians. The work performed by residents is multifaceted: it embodies the provision of care, service to more senior medical colleagues and acquisition of knowledge.<sup>5</sup> The size of the present supply of residents and the scope of their services imply that they are a medical commodity of immense present and future value.

Attention is currently being focused on surgical residency training.<sup>6-18</sup> This attention stems, in part, from mounting evidence of a surplus of surgeons in parts of the United States<sup>19</sup> and possibly in the entire country.<sup>20,21</sup> The number of residents in all surgical specialties\* has increased 105 per cent in the last two decades, and it is estimated that they perform between 10 and 30 per cent of the surgery in the United States.<sup>3,4,15</sup> In 1971-72, there were 16,370 surgical residents, one for every five practicing surgeons.<sup>3,22</sup> The number of surgical residency positions offered has increased 127 per cent in the last 20 years — so much so that there were

2180 unfilled positions in 1971-72, an elevenfold increase over the same period.<sup>3,4</sup>

In view of this rapid growth in the face of a possible surplus of surgeons, a number of changes have been suggested in both the organization and the content of surgical residency training. These suggestions encompass reductions in the number of residents and in the number of programs,<sup>14,15</sup> reductions in the duration of training,<sup>15</sup> and alterations in the distribution of operative work among residents to utilize available teaching cases more effectively and to prepare residents better for the job to be done in practice.<sup>6,8,10,18</sup> Before informed decisions can be made about consolidating residency programs, diminishing the number of residents or the years of training, or altering the content of training, further analysis of the content, the costs, and the number of surgical residency programs appears to be in order.

The operative content of residency training is amenable to measurement. By means of recently developed technics, both the volume and the complexity of the operative work loads of residents can be measured over the years of training and compared with those of surgeons in actual practice.<sup>19</sup> The present study applies such an analysis to the inpatient operative work loads of general surgical residents in one university-affiliated municipal hospital in New York City for a recent year. The municipal hospital was chosen because the nature of practice in that hospital assured that the resident recorded as having performed the procedure was in fact the operating surgeon. In the majority of cases, the operating resident was assisted by an attending surgeon. Data were not collected for the first or second assistant at the specific procedures in this hospital, since this information was not included in the hospital's computerized record-keeping system. This hospital is one of three through which residents rotate in a full university residency program, and the work loads in this study are therefore representative of only a portion of that university training program. The full university program is a five-year program after an internship.

This paper measures the operative work loads of resi-

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Supported by a research grant (2 PO1 HS 00451-04) from the National Center for Health Services Research and Development to the National Bureau of Economic Research.

The findings reported herein have not yet undergone the full critical review accorded the National Bureau's studies, including review by the Board of Directors.

\*Figures include specialties of colon and rectal surgery, (general) surgery, neurological surgery, obstetrics and gynecology, ophthalmology, orthopedic surgery, otolaryngology, plastic surgery, thoracic surgery, and urology.

dentists. It should not, however, be interpreted as an attempt to diminish the importance of nonoperative work in the training of residents. This work is a subject for subsequent analysis.

### METHODS

Hughes et al. have developed a method to quantify the operative work loads of surgeons.<sup>19</sup> This method expresses both the operative and the nonoperative work involved in a given operation in relation to that involved in an adult unilateral inguinal herniorrhaphy. This ratio is called the hernia equivalent (HE) of an operation. In a previous study, the relative values in the 1960 Relative Value Studies of the California Medical Association were shown to reflect accurately both the operative and the nonoperative work involved in the care of a patient undergoing a surgical procedure.<sup>19,23</sup> The HE of a procedure is calculated by division of the relative value of the procedure by the relative value of an adult unilateral inguinal herniorrhaphy. In the California study, an inguinal herniorrhaphy has a relative value of 35.0 (1 HE); thus, an operation with a relative value of 70.0, such as a vagotomy and pyloroplasty, equals 2.0 HE. In operations involving more than 1 procedure, a HE value equal to 20 per cent of the 1st secondary procedure is added to the value of the primary procedure to ensure full credit for the work involved in the given operation. In the present study, when a secondary procedure was performed by a resident other than the primary surgeon, full credit for the secondary procedure was given to the resident who performed it, slightly overestimating the work loads of the population of residents.

With the above method, HE values were assigned to all the inpatient operations performed by the residents. The volume of operative work loads (HE per week) and the complexity of operations (mean HE per operation) were calculated for individual residents, for each year of residency and for the entire residency program. To elucidate the content of operative training, specific procedures were enumerated by year of residency and for all residency years. The operative work loads of the residents and the frequency with which they performed individual procedures were compared with those of a population of 19 general surgeons in community practice in suburban New York.<sup>19</sup> The extent to which the work loads in the last year of residency were sufficient for eligibility for examination by the American Board of Surgery was estimated by projecting a total annual work load for the residents in the chief year.

### Population of Residents

Forty-one general surgical residents spent 770 man-weeks in the given year rotating through the studied hospital, for an average rotation of 18.8 weeks. There were 6 chief (5th-year) residents, 5 4th-year and 5 3d-year residents, 7 2d-year and 18 1st-year residents, with average rotations of 16, 17, 13, 18 and 22 working weeks respectively.

Rotations for the residents consisted of responsibility for general surgical-ward populations, including responsibility for patients with problems of chest, pediatric and head and neck surgery.\* The program also entailed rotations on a transplantation unit and on orthopedic surgery. First-year and 2d-year residents rotated through nonoperative services, the emergency room and the surgical intensive-care unit. For these residents, work loads were calculated in terms of both HE per week worked and HE per week on operative services. The resulting quotients were not sensitive to this distinction, however, and only HE per week worked are reported. The lack of sensitivity in these measurements is a result of both the very brief rotations of 2d-year residents on nonoperative services and the fact that the work loads of 1st-year residents were of such a low volume that their relative magnitude was not changed by the inclusion of time on nonoperative services.

\*For more detailed information on rotations for each year of residency according to per cent of resident-weeks on each service order NAPS Document 02179 from National Auxiliary Publications Service, c/o Microfiche Publications, 305 E. 46th St., New York, N.Y. 10017; remitting \$1.50 for each microfiche-copy reproduction or \$5 for each photocopy. Checks or money orders should be made payable to Microfiche Publications.

### RESULTS

During the studied year, the 41 residents performed 1222 operations, including 384 with secondary procedures. This is a total of 1768.2 HE of operative work. Weekly work loads ranged from 0.7 HE per week for first-year residents to 8.2 HE per week for chief residents. The mean weekly work load for all residents was 2.6 HE.

Weekly work loads according to year of residency are listed in Table 1 and shown graphically in Figure 1.<sup>†</sup> Second-year residents, with 2.0 HE per week, performed almost three times the volume of surgery per week performed by first-year residents (0.7 HE). This

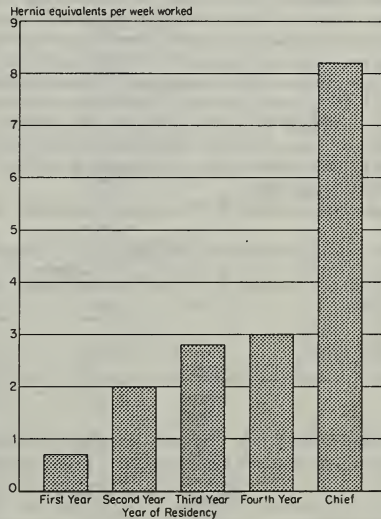


Figure 1. Mean Hernia Equivalents per Week Worked According to Year of Residency.

difference is significant at the 1 per cent level by the Mann-Whitney U test. Third-year residents performed 40 per cent more operative work per week than second-year residents ( $p > 0.05$ ) and four times that of first-year residents ( $p < 0.01$ ). There was no appreciable increase in the volume of operative work between third-year and fourth-year residents. As noted below, however, the complexity of operations undertaken by fourth-year residents was greater than that of residents in the third year. The operative work loads of chief residents, with a mean of 8.2 HE per week, were more than double those of fourth-year residents ( $p < 0.01$ ) and

<sup>†</sup>For more detailed information on work loads for individual residents order NAPS Document 02179 from National Auxiliary Publications Service, c/o Microfiche Publications, 305 E. 46th St., New York, N.Y. 10017; remitting \$1.50 for each microfiche-copy reproduction or \$5 for each photocopy. Checks or money orders should be made payable to Microfiche Publications.



more than 11 times those of first-year residents. The weekly volume of surgery for chief residents was, in fact, almost equal to the total weekly work loads of all other years of residency combined. This finding is due to an increased frequency of operations per week in the chief year (almost equal to the third and fourth years combined), as well as to an increased complexity of operations.

The mean complexity of all operations for all years was 1.31 HE, with a range from 1.04 HE per operation for first-year residents to 2.15 HE for chief residents (Table 1). The distribution of operations according to complexity for the entire population of residents and for each year of residency is given in Figure 2. The distribution of complexity for all years of residency (Fig. 2F) shows a multi peaked curve skewed to the right. Twenty-three per cent of the surgery is less complex than 1.0 HE — i.e., less complex than an inguinal herniorrhaphy. Forty-one per cent of the surgery falls between 1.0 HE and 1.7 HE (cholecystectomy), and 30 per cent between 1.7 and 2.9 HE (abdominal-perineal resection). Six per cent is contained in a long tail extending from 3.0 to 5.5 HE, with a slight clustering from 4.0 to 4.5 HE (vascular surgery).

Examination of the distributions of complexity of

operations according to year of residency (Fig. 2A-E) reveals a progressive shift toward procedures of increasing complexity over the years of training. Thirty-six per cent of the first-year residents' work load is less complex than 1.0 HE whereas 12 per cent of the chief residents' operations falls beneath this level of complexity. Residents in the first, second and third years perform no surgery of complexity greater than 2.9 HE, whereas 5 per cent of the work loads of fourth-year residents and 15 per cent of the chiefs' work are greater than this value. The differences in complexity of operations between chief residents and fourth-year residents and between fourth-year and third-year residents are statistically significant at the 1 per cent level by the Kolmogorov-Smirnov test. There is no statistically significant difference in the complexity of operations between the first and the second year, or between the second and the third year of residency.

The 20 most common procedures for the entire population of residents are listed in Table 2 according to frequency of the performance of each procedure. The three most frequent procedures — inguinal herniorrhaphy, appendectomy (primary) and cholecystectomy — comprise almost ¼ of all operations. No other procedure in the entire residency program was performed

Table 1. Volume and Complexity of Operative Work Loads of 41 General Surgical Residents by Year of Residency and of 19 General Surgeons in a Community Practice.

| Group*                  | Statistic | Wk Worked | No. of Operations | Total No. of HE | No. of Operations/Wk Worked | No. of HE/Wk Worked | Mean/HE Operation |
|-------------------------|-----------|-----------|-------------------|-----------------|-----------------------------|---------------------|-------------------|
| Chief residents (6)     | Total     | 95        | 373               | 768.6           |                             |                     |                   |
|                         | Mean      | 15.8      | 62.2              | 128.1           | 3.8                         | 8.2                 | 2.15              |
|                         | SD        | 6.6       | 31.8              | 57.0            | 0.8                         | 1.9                 | 0.27              |
|                         | Median    | 17.5      | 60.0              | 126.7           | 3.8                         | 8.3                 | 2.11              |
|                         | Range     | 8-24      | 27-105            | 60.7-213.7      | 2.8-5.2                     | 5.7-10.7            | 1.79-2.59         |
| 4th-year residents (5)  | Total     | 84        | 156               | 245.4           |                             |                     |                   |
|                         | Mean      | 16.8      | 31.2              | 49.1            | 1.9                         | 3.0                 | 1.63              |
|                         | SD        | 9.2       | 15.2              | 23.2            | 0.1                         | 0.4                 | 0.22              |
|                         | Median    | 16        | 31                | 50.5            | 1.9                         | 3.2                 | 1.63              |
|                         | Range     | 5-31      | 9-52              | 17.7-81.8       | 1.7-2.1                     | 2.6-3.5             | 1.33-1.96         |
| 3rd-yr residents (5)    | Total     | 63        | 155               | 185.4           |                             |                     |                   |
|                         | Mean      | 12.6      | 31.0              | 37.1            | 2.4                         | 2.8                 | 1.19              |
|                         | SD        | 3.6       | 19.8              | 25.1            | 1.0                         | 1.4                 | 0.12              |
|                         | Median    | 13        | 22                | 27.9            | 2.2                         | 2.8                 | 1.24              |
|                         | Range     | 8-16      | 12-63             | 15.2-78.0       | 1.4-3.9                     | 1.3-4.9             | 0.97-1.27         |
| 2d-yr residents (7)     | Total     | 129       | 232               | 255.0           |                             |                     |                   |
|                         | Mean      | 18.4      | 33.1              | 36.4            | 1.8                         | 2.0                 | 1.14              |
|                         | SD        | 3.4       | 13.0              | 11.6            | 0.7                         | 0.7                 | 0.17              |
|                         | Median    | 18        | 35                | 38.3            | 1.8                         | 1.8                 | 1.09              |
|                         | Range     | 14-25     | 16-49             | 22.5-50.7       | 0.8-2.7                     | 1.1-3.0             | 0.99-1.41         |
| 1st-yr residents (18)   | Total     | 399       | 306               | 313.9           |                             |                     |                   |
|                         | Mean      | 22.2      | 17.0              | 17.4            | 0.7                         | 0.7                 | 1.04              |
|                         | SD        | 6.4       | 12.2              | 12.5            | 0.4                         | 0.4                 | 0.16              |
|                         | Median    | 23        | 16                | 17.2            | 0.7                         | 0.8                 | 1.02              |
|                         | Range     | 8-32      | 2-33              | 1.9-39.4        | 0.1-1.4                     | 0.1-1.6             | 0.78-1.39         |
| All residents (41)      | Total     | 770       | 1,222             | 1,768.2         |                             |                     |                   |
|                         | Mean      | 18.8      | 29.8              | 43.1            | 1.7                         | 2.6                 | 1.31              |
|                         | SD        | 6.8       | 22.6              | 44.8            | 1.2                         | 2.7                 | 0.43              |
|                         | Median    | 17        | 30                | 29.5            | 1.4                         | 1.6                 | 1.19              |
|                         | Range     | 5-32      | 2-105             | 1.9-213.7       | 0.1-5.2                     | 0.1-10.7            | 0.78-2.59         |
| Community practice (19) | Total     | 912       | 4,178             | 3,952           |                             |                     |                   |
|                         | Mean      | 48.0      | 219.9             | 208.0           | 4.6                         | 4.3                 | 0.95              |
|                         | SD        | 0.0       | 155.1             | 147.6           | 3.2                         | 3.1                 | 0.12              |
|                         | Median    | 48        | 165               | 147             | 3.4                         | 3.1                 | 0.94              |
|                         | Range     | 48-48     | 47-569            | 43-625          | 1.0-11.8                    | 0.9-13.0            | 0.77-1.21         |

\*Figures in parentheses represent no. in group.



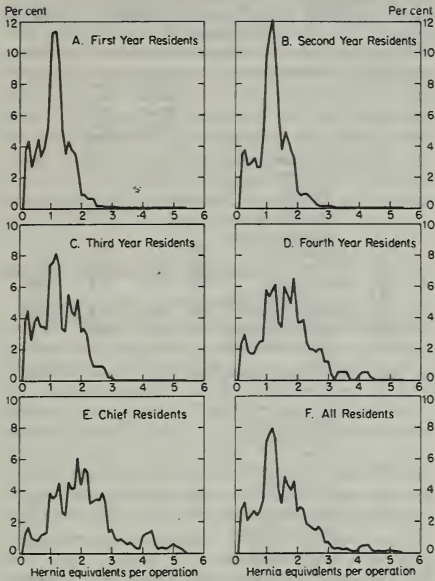


Figure 2. Distribution of Operations, According to Complexity, Performed by 41 General Surgical Residents.

Note that data have been smoothed by four-term moving average.

even  $\frac{1}{2}$  as often as any one of these. Fifteen procedures accounted for over 50 per cent of all operations in the residency program. Procedures below the top 15 were performed infrequently over the course of the year.

Procedures were also ranked according to their relative frequencies for each year of residency (not shown).<sup>\*</sup> Two procedures — appendectomy and cholecystectomy — occurred in the top four of each year, and inguinal herniorrhaphy occurred in the top two of all except the chief year. These three procedures not only accounted for 31 per cent of all operations in the first three years, in which there was a high concentration of cases in few diagnostic categories, but also accounted for 19 and 13 per cent of cases in the last two years. Thus, chief residents and fourth-year residents were performing a sizable component of their surgery in the same diagnostic categories as more junior residents, possibly on sicker patients.

The avowed purpose of the majority of surgical residency programs is to train residents for the practice of surgery. To measure the extent to which the studied

Table 2. Description of the 20 Primary Procedures Most Frequently Performed by 41 General Surgical Residents.

| RANK | H-ICDA Code* | PRIMARY PROCEDURE                                      | No. | % OF TOTAL (1222) OPERATIONS | CUMULATIVE % OF TOTAL OPERATIONS | HE VALUE |
|------|--------------|--|-----|------------------------------|----------------------------------|----------|
| 1    | 57.0/57.1    | Inguinal herniorrhaphy, including recurrent            | 106 | 8.67                         | 8.67                             | 1.00     |
| 2    | 49.1         | Appendectomy   | 98  | 8.01                         | 16.68                            | 1.14     |
| 3    | 53.5         | Cholecystectomy  | 88  | 7.20                         | 23.88                            | 1.71     |
| 4    | 39.8/39.1    | Breast biopsy/partial mastectomy                       | 35  | 2.86                         | 26.74                            | 0.43     |
| 5    | 44.3         | Partial gastrectomy                                    | 34  | 2.78                         | 29.52                            | 2.29     |
| 6    | 47.0         | Resection of colon, segmental                          | 34  | 2.78                         | 32.30                            | 2.29     |
| 7    | 89.1         | Local excision of lesion of skin & subcutaneous tissue | 32  | 2.62                         | 34.92                            | 0.16     |
| 8    | 82.3         | Open reduction, with internal fixation                 | 32  | 2.62                         | 37.54                            | 1.20     |
| 9    | 44.6         | Vagotomy   | 27  | 2.21                         | 39.75                            | 1.79     |
| 10   | 55.1         | Exploratory laparotomy or celiotomy                    | 27  | 2.21                         | 41.96                            | 1.14     |
| 11   | 87.7         | Amputation of leg                                      | 23  | 1.88                         | 43.84                            | 1.33     |
| 12   | 36.0         | Incision of peripheral vessel                          | 23  | 1.88                         | 45.72                            | 1.49     |
| 13   | 89.0         | Incision of skin & subcutaneous tissue                 | 20  | 1.64                         | 47.36                            | 0.06     |
| 14   | 47.5         | Colostomy  | 20  | 1.64                         | 49.00                            | 1.43     |
| 15   | 90.3         | Free skin graft to other sites                         | 19  | 1.55                         | 50.55                            | 0.68     |
| 16   | 36.5         | Excision & ligation of varicose veins                  | 16  | 1.31                         | 51.86                            | 1.14     |
| 17   | 37.8         | Biopsy of lymph nodes                                  | 16  | 1.31                         | 53.17                            | 0.14     |
| 18   | 57.4         | Repair of ventral hernia                               | 15  | 1.23                         | 54.40                            | 1.29     |
| 19   | 48.4         | Enterorrhaphy  | 14  | 1.14                         | 55.54                            | 1.71     |
| 20   | 48.5         | Closure of artificial stoma, intestine                 | 14  | 1.14                         | 56.68                            | 1.14     |

\*Commission on Professional & Hospital Activities, Hospital Adaptation of ICDA, H-ICDA, Ann Arbor, Nov., 1970.

hospital's residency program, if taken in isolation, would prepare a resident for the job to be done in practice, the work loads of the residents were compared with the annual work loads of a previously studied population of 19 general surgeons in practice in a suburban community in the New York metropolitan area.<sup>19</sup> The median operative complexity of the 4178 operations of the population of general surgeons was 0.94 HE (Table 1) — 21 per cent less complex than the median operative complexity of 1.19 HE for the residents. Figure 3 demonstrates that, in the aggregate, the residents have more complex work loads than the practicing surgeons; 25 per cent of the residents' work load is less complex than 1.0 HE as compared with almost 60 per cent of the surgery in the community. Similarly, 6 per cent of the residents' surgery falls between 2.9 and 5.5 HE, while less than 0.5 per cent of the community surgery falls in this range. The distributions of operations according to complexity of the first-year and second-year residents (Fig. 2A and B) most closely approximate that of the surgeons in community practice (Fig. 3). When the work loads of the residents were compared with those of the six community surgeons who were Board certified (not shown), the results were essentially the same. Of note, the median weekly work

<sup>\*</sup>For more detailed information on the ranking of the top five procedures for each year of residency and their relative frequencies order NAPS Document 02179 from National Auxiliary Publications Service, c/o Microfiche Publications, 305 E. 46th St., New York, N.Y. 10017; remitting \$1.50 for each microfiche-copy reproduction or \$5 for each photocopy. Checks or money orders should be made payable to Microfiche Publications.

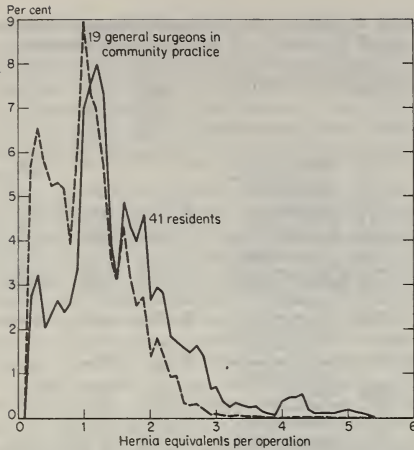


Figure 3. Distribution of Operations, According to Complexity, Performed by 41 General Surgical Residents and 19 General Surgeons in Community Practice.

Note that data have been smoothed by four-term moving average.

load of the chief residents (8.3 HE) was more than twice the median weekly work load of the community surgeons (3.1 HE).

The rankings of specific operations in the residency program (Table 2) and in community practice (Table 3) bear, at first glance, close similarity. In each setting, inguinal herniorrhaphy, appendectomy, cholecystectomy and breast biopsy/partial mastectomy occur within the five most common procedures. These procedures account for just over 1/4 of all operations in each setting. Tonsillectomy, with and without adenoidectomy, dilation and curettage, and proctoscopy without effect on tissue ranked seventh, eighth, and ninth in the community and accounted for over 10 per cent of the operations in that setting. These procedures were not included in the residency program because the rotations in the studied hospital did not include otolaryngology or gynecology and proctoscopies were, for the most part, performed on an outpatient basis. The remainder of the lists show a higher relative frequency of procedures of higher HE in the residency program than in the community. For instance, partial gastrectomy and segmental resection of the colon rank fifth and sixth in the residency program. They are 19th and 20th respectively in the community practice.

The quantification of the surgical work of residents, demonstrated in this paper, may be used to determine the extent to which a program provides a resident with sufficient operative experience for eligibility for the examinations leading to certification by the American Board of Surgery. For example, one can estimate the extent to which the full university program in which

Table 3. Description of the 20 Primary Procedures Most Frequently Performed by 19 General Surgeons in Community Practice.

| RANK | H-ICDA Code*  | PRIMARY PROCEDURE   | No. | % OF TOTAL (4178) OPERATIONS | CUMULATIVE % OF TOTAL OPERATIONS | HE VALUE |
|------|---------------|---|-----|------------------------------|----------------------------------|----------|
| 1    | 57.0/<br>57.1 | Inguinal herniorrhaphy, including recurrent                     | 472 | 11.3                         | 11.3                             | 1.00     |
| 2    | 89.1          | Local excision of lesion of skin & subcutaneous tissue          | 321 | 7.7                          | 19.0                             | 0.16     |
| 3    | 49.1          | Appendectomy  | 242 | 5.8                          | 24.8                             | 1.14     |
| 4    | 53.5          | Cholecystectomy   | 231 | 5.5                          | 30.3                             | 1.71     |
| 5    | 39.8/<br>39.1 | Breast biopsy / partial mastectomy                              | 229 | 5.5                          | 35.8                             | 0.43     |
| 6    | 51.3          | Hemorrhoidectomy  | 229 | 5.5                          | 41.3                             | 0.86     |
| 7    | 23.2/<br>23.1 | Tonsillectomy, with & without adenoidectomy                     | 227 | 5.5                          | 46.8                             | 0.50     |
| 8    | 71.9          | Dilation & curettage of uterus                                  | 108 | 2.6                          | 49.4                             | 0.43     |
| 9    | 91.5          | Endoscopy of colon or rectum without effect on tissue or lesion | 106 | 2.5                          | 51.9                             | 0.08     |
| 10   | 36.5          | Excision & ligation of varicose veins                           | 81  | 1.9                          | 53.8                             | 1.14     |
| 11   | 89.4          | Suture of skin  | 80  | 1.9                          | 55.7                             | 0.06     |
| 12   | 57.4          | Repair of ventral or incisional hernia                          | 74  | 1.8                          | 57.5                             | 1.29     |
| 13   | 89.0          | Incision of skin & subcutaneous tissue                          | 65  | 1.6                          | 59.1                             | 0.06     |
| 14   | 71.1          | Abdominal hysterectomy, total                                   | 65  | 1.6                          | 60.7                             | 1.71     |
| 15   | 06.1          | Thyroidectomy, partial or subtotal                              | 65  | 1.6                          | 62.3                             | 1.57     |
| 16   | 82.0          | Closed reduction without internal fixation                      | 60  | 1.4                          | 63.7                             | 0.74     |
| 17   | —†            | Bilateral phlebectomy   | 57  | 1.4                          | 65.1                             | 1.71     |
| 18   | 39.4          | Radical mastectomy  | 56  | 1.3                          | 66.4                             | 2.00     |
| 19   | 44.3          | Partial gastrectomy   | 53  | 1.3                          | 67.7                             | 2.29     |
| 20   | 47.0          | Resection of colon, segmental                                   | 53  | 1.3                          | 69.0                             | 2.29     |

\*Commission on Professional & Hospital Activities, Hospital Adaptation of ICDA, H-ICDA, Ann Arbor, Nov. 1970.

†This procedure is not coded separately by H-ICDA.

this hospital participates would supply a sufficient volume of operative experience. If one assumes that the operations performed by the chief residents rotating through the other two hospitals in the full program are of the same volume and complexity as in the given hospital, the weekly work load of operations equal to or greater than 1.0 HE of chief residents in the studied hospital can be extrapolated to yield an annual work load of such operations for 48 working weeks. The projected annual work load of such procedures is 167 per chief resident. On the average, "well trained" candidates presenting themselves to the American Board of Surgery from "highly regarded programs" are found to perform about 150 to 250 major procedures in their last year of training.\*

## DISCUSSION

The extent to which and the mechanisms whereby

\*Humphreys JW Jr. Personal communication.



residency programs raise (or, in some settings, conceivably lower) the cost of care embody complex economic problems on which much further work is indicated.<sup>24-26</sup> Much of this complexity derives from the interdigitation of the service and the educational tasks of residents, as well as from the lack of data on the possible utilization of substitute manpower. The present study is an attempt to apply quantification technics to one aspect of the education of surgical residents — the operative work that they perform. Its results raise questions in need of further evaluation.

#### **Surgical Work Loads of Residents**

Given the amount of general surgery presenting to a hospital, the mean operative work load per resident in the hospital's program is a function of both the number of residents in each year of training and the length of the residency program. In the present study, the mean operative work load per resident according to year of training ranged from 0.7 to 3.0 HE per week over the first four years. These relatively low work loads are, to some extent, necessitated by the service and educational activities involved in the care of each resident's own patients and in the care of the chief resident's patients and by the performance of nonoperative tasks, such as clinic and emergency-room service, central to the functioning of a hospital's surgical service. The question to be answered, however, is whether the tasks (both operative and nonoperative) performed by these residents over the years of training represent efficient utilization of manpower from both an educational and a service point of view. If not, it can be said that an underutilization of surgical skills (both operative and nonoperative) exists in this population of residents and that it represents a cost to society: a cost both in terms of the resources allocated to the residents in their present environment and in terms of possible unmet surgical or medical needs in other environments in which the residents might be better utilized.

The suggested underutilization of surgical skills in this population of residents may not be an isolated phenomenon; if not, its costs are not without consequence. Society, unaware of any current underutilization of surgical skills (both within and without residency programs), is initiating programs to increase substantially the number of M.D.s, many of whom will become surgical residents and later surgeons. The question of a possible widespread underutilization of surgical residents may best be answered by analysis of both the operative and the nonoperative work of larger populations of residents.

Data evaluating the contribution of surgical assisting and nonoperative work to the education of residents are warranted and may best be gained through analysis of the tasks residents perform. Such data would also help evaluate the importance of operative work in the overall training of a surgical resident and provide evidence concerning the extent to which the surgical work loads of a resident may or may not be

used as an index of the intensity of his overall educational experience.

#### **Number of Residents**

If the operative work loads of residents in the early years of training in other hospitals and in other surgical specialties were found to be similar to those in this study, and if there were a comparable underutilization of nonoperative skills, it would not seem unreasonable that the number of residents in certain residency programs could be reduced. With a reduction in the number of residents, the service component of residency training could be assumed in some measure by physician associates or other ancillary health personnel.<sup>27,28</sup> A reduction in the number of residents in appropriate programs would appear to increase the efficiency of the delivery of surgical education and, at the same time, by decreasing the output of specific types of surgeons, promote a more efficient utilization of the surgical skills of residents when they later enter practice.

#### **Length of Residency Training**

The relatively low operative work loads over the first four years of general surgical residency in the hospital studied suggest that the operations could be performed over a shorter period of training. Indeed, the program studied is a five-year program — one year longer than the minimum number of years required for certification by the American Board of Surgery.<sup>29</sup> A reduction in the pre-chief-resident years by one would cause only a modest increase in the weekly operative work loads of the residents involved. Even further time reductions would not create unreasonable operative work loads. One would again want detailed information about the content of the nonoperative tasks of the residents to evaluate effectively the implications of a reduced duration of residency on that portion of their learning experience. It should be borne in mind, however, that shortening residency programs would have the result of making surgery more attractive as a career, as well as causing a small, one-time increase in the number of practicing surgeons.

#### **Complexity of Operative Work Loads**

In the present study, the residents were performing surgical work that, in the aggregate, was more complex than that being performed by a population of general surgeons in community practice in a neighboring suburb. To a certain extent, this is not a surprising finding. The purpose of residency training is to prepare residents to deal successfully with the surgical problems that they will face in future practice. To the extent that an increased complexity of operations in residency training raises the confidence of a resident and enables him to anticipate, in his practice, unusual, untoward or emergency situations, it would appear to constitute an important part of training. To the extent that an in-



creased complexity of cases in residency training represents the acquisition of skills that will not be applied in practice, it constitutes overtraining. The comparison of the procedures performed in the residency program and in the community illustrates that the residents were learning essentially procedures that constitute the bulk of community practice. In line with an attempt to maximize the return to investment in the acquisition of skills in surgical training, work-load analyses would appear to be in order for more highly referral-oriented programs and for more highly specialized post-residency and "super-specialty" years to determine the subsequent utilization of these even more specialized skills.

The purpose of this study is to illustrate the application of quantification technics to the operative work of surgical residents in the hope of elucidating the type of work that they perform and of providing information for informed decisions on the most efficient way to educate them. This study was performed in the residency program of one surgical specialty in one municipal hospital, and its results were compared with community practice in one neighboring suburb. Variations in the specialty studied, in the type of the hospital studied, or in the location of the hospital would probably affect the volume and the complexity of the work loads of the residents. Likewise, work loads of practicing surgeons vary in different communities. Nonetheless, the study suggests potential underutilization of valuable skills in a population of residents. This potential underutilization may be neither an isolated phenomenon nor one peculiar to surgery.

We are indebted to Drs. Victor Fuchs, Kurt Deuschle, and Michael Grossman for help in completing this study, to Ms. Carol Breckner, Phyllis Goldberg, Janice Platt and Mr. John Wolfe for research assistance and to Mr. Irving Forman for technical assistance.

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THE DEMAND FOR SURGICAL  
RESIDENTS: SOME  
PRELIMINARY OBSERVATIONS

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Reprinted from

SURGERY  
St. Louis

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Vol. 76, No. 1, pp. 176-183, July, 1974

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(Printed in the U. S. A.)

**Table I.** Growth rates of approved residency positions offered by various specialties in the United States by selected intervals, 1940-73\* (continuously compounded per annum)

| Residency positions offered | Interval |         |         |         |
|-----------------------------|----------|---------|---------|---------|
|                             | 1940-50  | 1950-60 | 1960-66 | 1966-73 |
| All surgical specialties:   | 13.9     | 4.8     | 3.0     | 3.2     |
| General surgery             | 16.3     | 4.4     | 2.3     | 2.3     |
| Neurosurgery                | 17.6     | 7.2     | 4.5     | 3.8     |
| Obstetrics-gynecology       | 12.9     | 5.8     | 1.1†    | 2.4     |
| Ophthalmology               | 11.9     | 4.6     | 5.9     | 4.1     |
| Orthopedic surgery          | 13.9     | 4.6     | 4.6     | 6.1     |
| Otolaryngology              | 4.3      | 2.8     | 7.5     | 4.4     |
| Plastic surgery             | 20.5     | 10.8    | 7.8     | 8.4     |
| Thoracic surgery            | 12.0     | 8.9     | 5.1     | 1.6     |
| Urology                     | 13.7     | 3.8     | 3.3     | 3.1     |
| Colon and rectal surgery    | ‡        | 7.2     | -4.4    | 8.7†    |
| Nonsurgical specialties§    | 13.6     | 6.5     | 3.7     | 4.9     |
| Family practice             | ‡        | 17.3    | 1.0†    | 13.3    |
| All specialties             | 13.8     | 5.8     | 3.5     | 3.5     |
| Graduating M.D.'s           | 0.9      | 1.9     | 1.2     | 2.4     |

\*In the following equation:  $\ln P_t = a + bt$ , where  $P_t$  = number of positions offered in year  $t$ , was fit to annual data by a linear regression. In this specification, the estimated  $b$  is the correct estimate of the continuously compounded growth rate per annum.

†Not significant at the 0.05 level by  $t$  test.

‡None in 1940.

§Hospital-based specialties only; does not include Aerospace Medicine, General Preventive Medicine, Occupational Medicine, and Public Health.

||Includes general practice.

### The demand for surgical residents: Some preliminary observations

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THE INCREASINGLY articulated inability of Americans to gain access to primary care in the face of both substantial governmental support for the training of physicians and the escalating costs of health care is causing policy makers to look seriously at the process whereby future physicians are being

trained.<sup>12</sup> Simultaneously, a trend that has distinguished American medicine in its quest for quality over the last quarter century—the thrust toward specialization—is being perceived, in its present dimensions, as contrary to the health needs of the American people. As a result, incentive systems specific to the production of primary-care physicians are being explored and considerable thought is being directed toward possible regulation of both the number and the specialty distribution of residents. The factors contributing to the trend toward specialization are multiple and complex. I would like to focus in a pre-

Supported by a United States Public Health Service research grant (5 PO1 HS 00451) from the Bureau of Health Services Research and Evaluation and Health Career Scientist Award No. 1786 from the Health Research Council of the City of New York.

The findings reported herein have not yet undergone the full critical review accorded the National Bureau's studies, including review by the Board of Directors.

Presented at the Thirty-fifth Annual Meeting of the Society of University Surgeons, St. Louis, Mo., Feb. 14-16, 1974.

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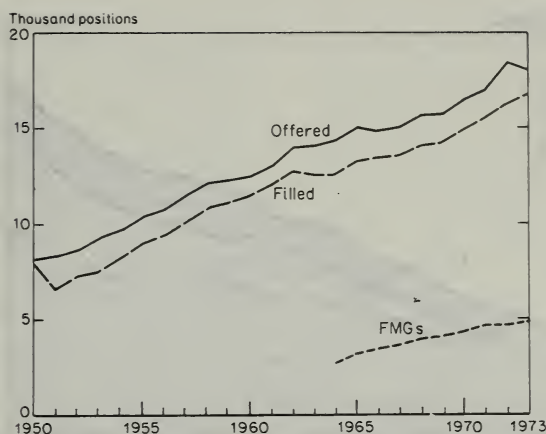


Fig. 1. Approved residency positions offered and filled by U. S. and Canadian medical graduates and FMG's, all surgical specialties, United States, 1950-1973. Data on the number of FMG's in approved residency programs by specialty were first published in 1964. Source: American Medical Association: Approved internships and residencies in the United States, J. A. M. A., annually 1950-1955; American Medical Association: Graduate medical education in the United States, J. A. M. A., annually 1956-1960, 1962; Nunemaker, J. C., Thompson, W. V., Adams, R. E., and Tracy, R.: Directory of approved internships and residencies, Chicago, 1961, American Medical Association; American Medical Association: Medical education in the United States, J. A. M. A., annually 1963-1969, 1971-1973; American Medical Association, Council on Medical Education: Unpublished 1970 data.

liminary fashion on one aspect of the trend toward specialization in surgery—the demand for surgical residents.

Since 1940, the quantity of surgical residents demanded in the United States—the number of approved surgical residency positions offered—has grown at a continuously compounded rate of 7 percent per annum and is now almost nine times what it was in 1940.\* In that year, there were 2,030 approved surgical residency positions offered† and today there are 18,174.<sup>2, 21</sup> These surgical positions comprise 35.6 percent of all approved residency positions offered in the United States.<sup>2</sup> The period of most rapid

growth in surgical positions offered occurred in the 1940's when they increased at a rate of 14 percent per annum (Table I). Both Pearse<sup>16</sup> and Rousselot<sup>18</sup> have commented on the role of both World War II and the G.I. bill in contributing to this growth. Growth rates declined in the fifties to 5 percent per year and in the sixties to 3 percent a year. This decline is attributable in part to a growing base phenomenon, such that an increasing number of new positions must be added each year to maintain a steady growth rate. For example, almost the same number of new positions was added per year in the late sixties (414) as in the 1950's (431) even though the rate of growth in the sixties (2.6 percent per annum) was roughly half that of the fifties (4.8 percent per annum). Despite a decline of 376 positions offered in 1973, the mean number of new positions offered per year in the seventies has been 529, 28 percent in excess of the mean number of new positions offered in the previous four years. It remains to be seen whether the 1973

\*Throughout this paper, growth rates are measured as continuously compounded rates per annum unless otherwise specified. These growth rates are estimated using annual data fit by linear regression to the equation:  $\ln P_t = a + bt$ , where  $P_t$  = number of positions offered in year  $t$ . In this specification, the estimated  $b$  is the correct estimate of the continuously compounded growth rate per annum.

†Figures include specialties of colon and rectal surgery, (general) surgery, neurological surgery, obstetrics and gynecology, ophthalmology, orthopedic surgery, otolaryngology, plastic surgery, thoracic surgery, and urology.

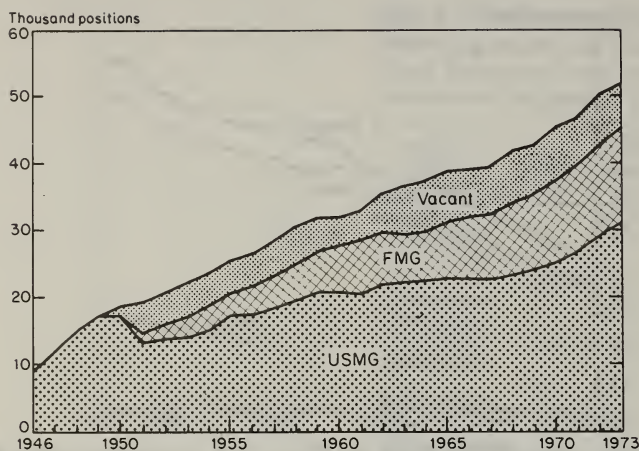


Fig. 2. Approved residency positions offered and filled by U. S. and Canadian medical graduates and FMG's, all specialties, United States, 1946-1973. Data on numbers of vacancies and FMG's were first recorded in 1950 and 1951, respectively. There is evidence to suggest that the relative magnitude of each was not large prior to those dates.<sup>16, 22</sup> Source: American Medical Association: Medical education in the United States 1972-73, J. A. M. A. 226: 938, 1973.

decrease signals a reversal of or a transient deviation from the trend toward an increase in the mean number of positions offered per year (Fig. 1).

The problem of the growth of specialization in American medicine is by no means peculiar to surgery (Table I). Since the 1940's, nonsurgical positions offered have grown by 8 percent per annum and, in the last three years, grew at a rate of 6.2 percent per annum. At this latter rate, all nonsurgical positions offered would double in 11 years. Of note, the fastest growing nonsurgical specialty is family practice,\* with a 1970's growth rate in positions offered of 32 percent per annum. The recent, rapid rise of this growth rate suggests that the availability of positions in a given specialty can be made responsive to society's perceived needs. The present growth rate in family practice notwithstanding, positions offered in that specialty now equal only 6 percent of all nonsurgical positions offered and residents in that specialty account for only 5 percent of nonsurgical residents.<sup>2</sup> Nonsurgical positions other than family practice have grown in the seventies

at a rate of 4.9 percent per annum; continuing at this rate they would double in just over 14 years.

There is much discussion at present of a possible excess of surgeons in the United States (a subject in itself requiring considerable further research). It is important, however, that the corresponding growth of nonsurgical specialization be noted, lest attempts to regulate the number of residents by specialty focus disproportionately on a possible surgical overpopulation as opposed to a nonsurgical overpopulation. It is much easier to measure a paucity of hernia equivalents in the practice of a surgical specialist (or a surgical resident) than it is to assess the degree of underutilization entailed in a highly trained internist's treating the common cold and other ailments of low morbidity.<sup>13, 14</sup>

There has been considerable variation in the recent growth of individual surgical specialties. Since 1966, thoracic surgical positions, which had the second highest rate of growth in the 1950's, 9 percent per year, have had the lowest rate of growth, less than 2 percent per annum. General surgery has had the next lowest rate, with obstetrics and gynecology almost equal to general surgery; both

\*Includes general practice.

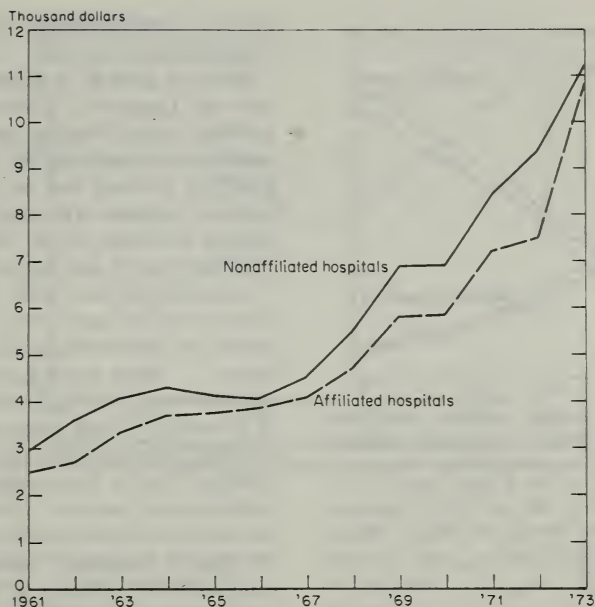


Fig. 3. Mean annual salaries offered residents in approved positions, all specialties, by hospital affiliation, 1961-1973. Source: American Medical Association: Medical education in the United States 1972-73, J. A. M. A. 226: 930, 1973; American Medical Association: Medical education in the United States, J. A. M. A. 210: 1505, 1969.

slightly greater than 2 percent. It would be interesting to know if the slower rates of growth of these three specialties bear any relationship to saturation (actual or surmised) in these areas. The growth of thoracic positions offered will be especially interesting to watch with regard to the ultimate determination of the efficacy of coronary bypass surgery. At the other end of the surgical spectrum lies plastic surgery, with a growth rate of 8 percent per annum since 1966 and of 11 percent in the last three years alone. Were the rate of this most recent three-year period to continue, plastic surgical positions offered would nearly double in six years. Orthopedic surgery has grown by 6 percent per annum since 1966; at this rate it would double its positions in 11 years. All other surgical specialties have grown by 3 to 4 percent since 1966 except colon and rectal surgery (which offers only 26 positions), which had a growth rate of 9 percent (not significant).

By way of contrast to this growth in the

quantity of residents demanded, the population of the United States has grown, since 1940, at a rate of 1.4 percent per annum and United States medical graduates at a rate of 2.0 percent per annum.<sup>1, 19, 20</sup> The excess rate of growth of the quantity of all residents demanded and of all surgical residents demanded over the production of United States medical graduates has resulted in vacancy rates in all residency positions offered and in surgical positions offered that, since 1960, have averaged 17 and 10 percent per year, respectively, and are currently 12 and 8 percent, respectively (Figs. 1 and 2). This excess in demand would appear to be responsible, in large part, for the rapid growth in positions filled by foreign medical graduates (FMG's), who now occupy almost 27 percent of all residency positions filled and 29 percent of surgical residency positions filled.<sup>2</sup>

Evidence for the strength of this excess demand is found in the fact that, during the period 1966-1973, when positions offered in all specialties increased at 4.3 percent per



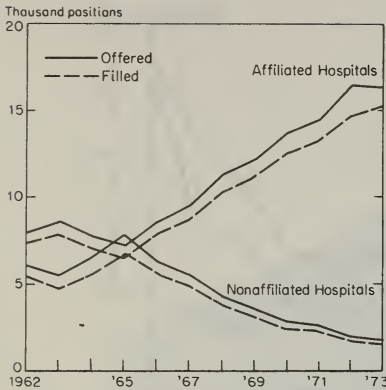


Fig. 4. Approved residency positions offered and filled by hospital affiliation, all surgical specialties, 1962-1973. Source: American Medical Association: Medical education in the United States, J. A. M. A., annually 1963-1969, 1971-1973; American Medical Association, Council on Medical Education: Unpublished 1970 data.

year, residents' mean salaries increased at 14.5 percent per year (Fig. 3).<sup>3, 6</sup> This increase was such that the mean salary offered residents doubled in less than five years to \$10,880 in 1972-1973. This salary increase, long overdue from the perspective of residents, has three important ramifications. First, it increases the rate of return to specialization by reducing the foregone earnings that are associated with specialty training and constitute a major disincentive toward pursuing lengthy training. Second, it would appear that FMG's might be most influenced by this salary increase and their supply most sensitive to further increases. Third, this increase in salaries coincides temporally with and, in large part, would appear to be a result of federal subsidization of patient care through Medicare and Medicaid. If so, these salary increases are being financed indirectly by the Federal government. This is a point of crucial importance when it comes to the question of regulating the growth of specialization.

The subject of the demand for residents is highly complex and warrants in-depth study. A number of questions emerge at this time,

however, upon which some preliminary light might be tentatively shed.

**Why the growth in demand?** Almost 10 years ago, Longmire,<sup>15</sup> in his seminal paper on graduate surgical training, noted some of the problems associated with the expansion of the supply of surgeons and the proliferation of residency positions. He stated: "One of the greatest paradoxes of our times is the overwhelming zeal of almost every surgeon to be a teacher. Practically every hospital of 200 beds or more in this country seems bent on having an approved surgical residency program. . . . Some training programs are initiated because of a sincere desire on the part of a number of staff surgeons to engage in teaching. Some programs are started for their 'prestige value' in the community, and some, unfortunately, merely to obtain the services of a group of residents to do the 'scut work'." The last of Longmire's reasons, the service contribution of residents to the care of patients of attending surgeons, not involving direct out-of-pocket expenses to these attendings, would appear in an equivocal situation to be of sufficient weight to propel the development, expansion, or, at the very least, maintenance of a surgical residency program. A potential mechanism for achieving a redistribution of residents among specialties, and still enabling the service tasks now associated with residency training to be accomplished, may lie in the utilization of paraprofessional health manpower in graduate education settings.<sup>9, 11</sup> To date, the utilization of paraprofessional manpower in ambulatory settings has been shown to increase physician productivity by as much as 40 to 75 percent.<sup>17</sup> Studies of the costs of and the quality of care implications in the use of such manpower in educational settings are warranted.

**Where is the growth in the number of residency positions offered?** Since 1962, the number of hospitals in the United States with approved residency programs has increased by 12.5 percent, a growth of slightly more than 1 percent per annum. In 1962, there were 1,366 such hospitals; in 1973, there were 1,562.<sup>4, 7</sup> In contrast to this modest growth in the number of hospitals offering approved

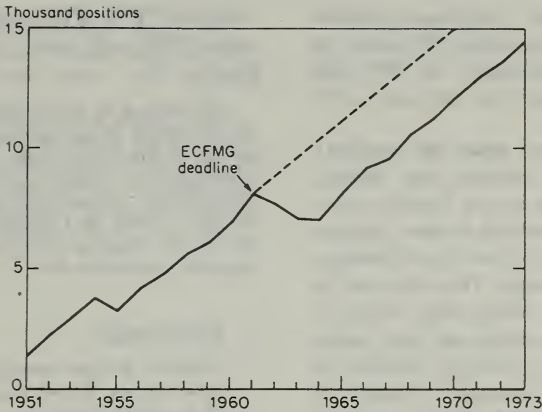


Fig. 5. FMG's in approved residency positions, all specialties, United States, 1951-1973. Source: American Medical Association: Medical education in the United States 1972-73, J. A. M. A. 226: 938, 1973.

residency programs is a marked change in the affiliation status of these hospitals.

In 1962, 377 of the hospitals with approved programs were affiliated with academic medical centers and 989 were unaffiliated.<sup>7</sup> In 1973, however, the numbers were essentially reversed: 1,109 hospitals with approved programs were affiliated with academic medical centers and only 453 were unaffiliated.<sup>4</sup>

This trend toward academic affiliation by hospitals with approved programs is such that in 1973, 91 percent of all the 18,174 positions offered in the surgical specialties (16,487) were in affiliated hospitals and 93 percent of these were occupied (Fig. 4).<sup>3\*</sup> Nine percent of all positions offered (1,687) were in non-affiliated hospitals and 87 percent of these were filled. The significance of this trend toward affiliation is such that the overwhelming majority of surgical residency positions now offered are located in academic programs supervised by university surgeons. With only 9 percent of surgical residency positions in nonacademic hands, attempts to regulate positions offered will predominantly involve university personnel.

For every surgical position erased from the unaffiliated rolls since 1965, one and a half positions have appeared on the affiliated rolls.

\*The same trend also exists in the nonsurgical specialties.

How has this growth occurred? Since 1965, the number of surgical affiliated programs has grown at a rate of 4.2 percent per annum and the number of positions per affiliated surgical program has grown by 6.4 percent per annum. Thus it would appear that the growth in surgical positions in affiliated hospitals is a result of: (1) the affiliation of previously unaffiliated and of new programs, (2) the creation of new programs in affiliated institutions, and (3) the expansion of existing affiliated programs.

The trend toward affiliation is complex. It has undoubtedly been hastened by policy recommendations and the behavior of accrediting agencies.<sup>8</sup> Cohn has also discussed the benefits, as well as the costs, entailed in an academic surgical program's affiliating with a previously unaffiliated institution.<sup>10</sup> The temporal coincidence of this trend with both availability of federal funds and rise in residents' salaries is worth noting (Figs. 3 and 4). This coincidence, without an obvious explanation, underscores the necessity for research in this area. It is apparent, however, that the dramatic increase in salaries for residents has given affiliated hospitals the means to wipe away the one competitive advantage unaffiliated hospitals had previously been able to use to attract residents—a substantially

larger salary. In 1962, unaffiliated hospitals were offering a mean salary 30 percent in excess of affiliated hospitals. By 1973, this competitive advantage had dropped to 3.6 percent (Fig. 3).

#### What can be done about the demand?

There is a growing consensus that the distribution of residents among specialty positions should be controlled in some fashion consistent with the long-run health interests of the American people. This consensus is developing at a time when many Americans are finding that controls do not often beget the desired results. A previous attempt at control in residency training is worthy of comment. As mentioned, foreign medical graduates comprise approximately 27 percent of all residents in the United States today. This is perceived by many as a problem for the quality of health services in the United States. (In reality, the phenomenon is a complex one deserving of considerable further evaluation of the exact costs, if any, to the United States.) This *caveat* notwithstanding, in 1958, the ECFMG examination was introduced in an attempt to improve the quality of FMG's entering graduate training in the United States and, at some level, to modulate the growth of FMG's in the United States. The year 1961 was stipulated as the deadline after which an FMG could not occupy an approved residency position without having passed this exam. In the three years following the exam deadline, there was a marked drop in the numbers of FMG's entering United States residency positions such that by 1964, 2,500 fewer FMG residents were training in the United States than would have previously been anticipated (Fig. 5). Thereafter, however, FMG's were able to adapt to the exam requirement and to begin increasing each year in the same numbers as previously. This growth now continues unabated with the one-time diminution of 2,500 still obtaining. On the basis of this experience, it would appear that regulation of specialty training would have to be directed at the demand for residents. The demand for residents is a complex problem with important economic and quality of care implications. These implications are subjects for in-depth empirical in-

vestigation. It is to be hoped that regulation would follow only upon appropriate investigation.

I am indebted to Mr. Eugene Lewit for help in the preparation of this manuscript. I am also indebted to Mr. John Wolfe and Ms. Barbara Chamberlain for research assistance and to Mr. Irving Forman for technical assistance. I would also like to thank the Council on Medical Education of the American Medical Association for supplying unpublished data.

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TIME UTILIZATION OF A  
POPULATION OF GENERAL  
SURGEONS IN COMMUNITY  
PRACTICE

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Reprinted from

SURGERY

St. Louis

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Vol. 77, No. 3, pp. 371-383, March, 1975

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(Printed in the U.S. A.)

# Time utilization of a population of general surgeons in community practice

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A time-motion study was performed on a population of general surgeons in suburban community practice whose median weekly operative work load had been previously determined to be 3.1 hernia equivalents (HE). The mean observed 6 day working week of this population of general surgeons was found to be 34.5 hours, of which 28.7 hours were devoted to professional activities. In addition, each surgeon averaged 1.4 hours per night in professional activities for a total work week of 44.3 hours. Thirty-five percent of the mean observed working week was spent in office activities and 50 percent spent in hospital activities. During the mean observed week, 18.5 hours (54 percent) were devoted to patient care, of which 16.5 hours were judged to be devoted to surgical care. Surgeons with above-median operative work loads in the previous study devoted 67 percent more time to professional activities and twice as much time to surgical activities as surgeons with below-median work loads. The findings support the hypothesis that there appears to be an underutilization of costly and highly specialized medical skills in the particular community and suggest that the HE methodology is a valid measure not only of the operative work of surgeons in community practice but of total time devoted to surgical care.

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A RECENT STUDY found that the median weekly operative work load of a population of 19 general surgeons in community practice in the New York metropolitan area was 3.1 hernia equivalents (HE).<sup>9</sup> One HE is defined as the amount of work involved in

the operative, pre-, and postoperative care of an adult patient undergoing a unilateral inguinal herniorrhaphy. This median operative work load was less than one third of an informal standard of 10 HE per week, suggested by surgeons as comprising an active, yet not overburdening weekly work load, and less than one third of the median weekly work load of a population of general surgeons in a prepaid group practice.<sup>9, 10\*</sup>

Supported by a United States Public Health Service research grant (5 PO1 HS 00451) from the Bureau of Health Services Research and Evaluation and Health Career Scientist Award No. 1786 from the Health Research Council of the City of New York.

Accepted for publication Jan. 2, 1975.

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The findings reported herein have not yet undergone the full critical review accorded the National Bureau's studies, including review by the Board of Directors.

\*At the time of this previous study, the general surgeon: population ratio in the suburban community was 10.1:100,000, roughly comparable to the ratio for the United States as a whole, 9.8:100,000, at that time.<sup>11</sup> Evidence to date suggests that operative work loads of the order of magnitude found in this population of general surgeons may not be isolated findings.<sup>3</sup>



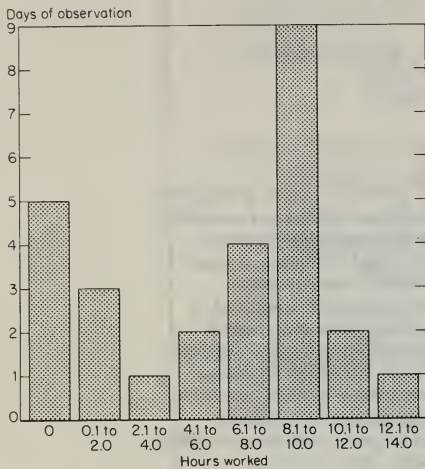


Fig. 1. Distribution of the 27 days of observation by number of hours worked.

The low operative work loads of this population of general surgeons raised questions both about how these surgeons were spending the remainder of their professional time and the extent to which the volume of their work loads, measured in HE, was a valid measure of their over-all utilization as general surgeons. To answer these questions, a time-motion study was performed on this population of general surgeons. Time-motion studies have been previously reported on populations of pediatricians, internists, general practitioners, and medical interns.<sup>1, 2, 14, 15</sup> The results of these studies have been reviewed in part by Brody and Stokes.<sup>2</sup>

## METHODS

Fourteen of the 19 general surgeons in the previous study were still in active practice in the community at the time of this study. Of the remaining five, two had emigrated to other communities, two were incapacitated by illness, and one had retired. In addition, two new general surgeons had recently settled in the community. Permission for participation in this study was obtained from 12 of the 14 previously studied surgeons and from the two new arrivals.

Participation in the study required that the daily tasks of each surgeon be timed by

an observer for 2 entire working days drawn at random, by nonreplacement, from two nonsuccessive weeks in the fall of a recent year. Saturdays were included as days for observation. Each surgeon was notified of the specific day for observation no sooner than 24 to 48 hours prior to the actual day. He could refuse to be followed on a specific day but could not substitute another day. Each surgeon was met by the observer at the very beginning of his professional day, queried as to the nature and duration of his professional activities during the previous evening, and then accompanied by the observer until the end of all scheduled professional activities on that day. The observer (F. V. L.) was a fourth-year medical student who is currently a resident in general surgery.

The observer recorded the individual activities of the surgeons to the nearest minute, utilizing pretested codes and forms specifically designed for this study. In addition, he recorded the location of each activity and its relevance to patient care. Activities involving patient care were defined as "direct" patient care if they were performed in the presence of a patient (e.g., performing a physical examination or a surgical procedure) and as "indirect" patient care if they were performed in the absence of a patient (e.g., reviewing an x-ray or writing orders).

Direct patient care activities were further classified as either surgical or nonsurgical, depending on both their nature and the complaint of the patient involved. Surgical problems were broadly defined to include not only those that might be expected to lead to or be the result of an operation, e.g., evaluation of a hernia or postoperative wound care, but also diagnostic problems, such as abdominal pain that might, at some point, reasonably be expected to involve a surgeon, if only on a consultative basis. The treating of illnesses neither resulting from nor attendant to surgical therapy, such as upper respiratory infections or skin disorders, was classified as nonsurgical patient care. Each surgical patient was further classified by operative status, e.g., preoperative, postoperative, operative, or nonoperative.

Table I. Distribution of time in mean observed working week by type of activity

| Activity                    | Mean time per activity per week (hr.:min.) | Percent of week | Percent of category |
|-----------------------------|--|-----------------|---------------------|
| <i>Office activities:</i>   | 11:59                                      | 34.8            | 100.0               |
| Direct patient care         | 5:13                                       | 15.1            | 43.5                |
| Indirect patient care       | 0:57                                       | 2.8             | 7.9                 |
| Administration              | 1:15                                       | 3.6             | 10.4                |
| Other nonpatient care       | 4:33                                       | 13.2            | 38.0                |
| Personal and meals          | 2:15                                       | 6.5             | 18.8                |
| Waiting                     | 1:56                                       | 5.6             | 16.1                |
| Observer                    | 0:21                                       | 1.0             | 2.9                 |
| <i>Hospital activities:</i> | 17:12                                      | 49.9            | 100.0               |
| Rounds time                 | 3:33                                       | 10.3            | 20.6                |
| Direct patient care         | 1:53                                       | 5.4             | 10.9                |
| Indirect patient care       | 1:16                                       | 3.7             | 7.4                 |
| Travel                      | 0:17                                       | 0.8             | 1.6                 |
| Personal                    | 0:08                                       | 0.4             | 0.8                 |
| Operative time              | 8:07                                       | 23.5            | 47.2                |
| As chief surgeon            | 5:36                                       | 16.2            | 32.6                |
| As assistant surgeon        | 2:00                                       | 5.8             | 11.6                |
| Ambulatory                  | 0:32                                       | 1.5             | 3.1                 |
| Other direct patient care   | 0:05                                       | 0.2             | 0.5                 |
| Other indirect patient care | 0:54                                       | 2.6             | 5.2                 |
| Teaching                    | 0:21                                       | 1.0             | 2.0                 |
| Administration              | 0:53                                       | 2.6             | 5.1                 |
| Other internal travel       | 0:56                                       | 2.7             | 5.4                 |
| Other nonpatient care       | 2:23                                       | 6.9             | 13.9                |
| <i>Other activities:</i>    | 5:18                                       | 15.4            | 100.0               |
| External travel             | 3:13                                       | 9.3             | 60.7                |
| House calls                 | 0:12                                       | 0.6             | 3.8                 |
| Other direct patient care   | 0:47                                       | 2.3             | 14.8                |
| Other administration        | 0:02                                       | 0.1             | 0.6                 |
| Other nonpatient care       | 1:04                                       | 3.1             | 20.1                |
| Mean observed working week  | 34:29                                      | 100.0           | —                   |

In addition to recording these and the other professional activities of the surgeons, the observer also recorded time devoted to personal activities, including meals, during the working day. Both the observer and the surgeons were carefully instructed to refrain from any interaction during the course of this study. When such interaction occurred, it was recorded as observer time.

On the basis of the observed daily activities, an average working week was calculated for this population of general surgeons and its components were analyzed. Evening activities also were analyzed. The results of this study were then integrated with those of the previous study and analysis was undertaken to determine the relationship between the volume of each surgeon's operative work load in the previous study and the time he devoted to daily professional activities in the current study.

## RESULTS

**The working week.** Of the 28 days of potential observation, information was gathered on 27. This information entailed direct observation on 21 days and advance testimony from surgeons that no professional activities were scheduled on 5 of the days selected for observation. One surgeon asked to be released from the study after his first day of observation; and one surgeon refused to be observed on his second specified day because he claimed it was to contain little, if any, professional activity. This day was recorded as such and included in the study.\*

The distribution of the 27 days of observation by the number of hours worked is illustrated in Fig. 1. The figure shows an asym-

\*On the basis of the testimony of the surgeon and knowledge of his previous work day, the surgeon was credited with 50 minutes of work apportioned according to his previously observed day.

Table II. Direct patient care time per observed office patient visit for all surgeons and for above- and below-median hernia equivalent groups\*

|   | No. of<br>observed<br>patients | Mean time<br>per observed<br>patient visit<br>(min.) | Standard<br>deviation |
|---|--------------------------------|--|-----------------------|
| <i>All surgeons:</i>                      |                                |  |                       |
| Office patients                           | 173                            | 7.5  | 6.2                   |
| Nonsurgical patients                      | 39                             | 7.4  | 6.0                   |
| Surgical patients                         | 134                            | 7.5  | 6.3                   |
| Preoperative                              | 14                             | 12.4   | 10.8                  |
| Postoperative                             | 75                             | 5.8  | 4.2                   |
| Nonoperative surgical                     | 45                             | 9.0  | 5.9                   |
| <i>Surgeons in above-median HE group:</i> |                                |  |                       |
| Office patients                           | 69                             | 8.7  | 5.3                   |
| Nonsurgical patients                      | 21                             | 7.6  | 5.4                   |
| Surgical patients                         | 48                             | 9.1  | 5.2                   |
| Preoperative                              | 1                              | 10.0   | 0.0                   |
| Postoperative                             | 27                             | 8.3  | 4.9                   |
| Nonoperative surgical                     | 20                             | 10.2   | 5.6                   |
| <i>Surgeons in below-median HE group:</i> |                                |  |                       |
| Office patients                           | 104                            | 6.7  | 6.6                   |
| Nonsurgical patients                      | 18                             | 7.1  | 6.5                   |
| Surgical patients                         | 86                             | 6.7  | 6.6                   |
| Preoperative                              | 13                             | 12.6   | 11.2                  |
| Postoperative                             | 48                             | 4.3  | 3.0                   |
| Nonoperative surgical                     | 25                             | 8.0  | 6.0                   |

\*Data for all surgeons are based on 26 days of observation and 13 days of observation for surgeons in each group. (See footnote, p. 377.)

metric distribution with clustering around very short working days (30 percent of days were less than 2 hours long) and around long working days (45 percent of days were greater than 8 hours long). With the exception that Saturdays were lighter working days (mean observed time, 1.3 hours), there appeared to be no systematic variation by specific weekdays in the length of the working day. Because of the high variability of the individual days of observation and for ease of exposition, the observed working days were aggregated and expressed as a mean observed working week. This mean week, Monday through Saturday, was obtained by multiplying by 5 the mean time spent on the job over the 23 observed weekdays and by adding to this the mean time for the 4 observed Saturdays. Thus the weighting scheme utilized to obtain the mean observed working week explicitly took the difference between Saturdays and weekdays into account.

The mean observed working week of this population of general surgeons was found to

be 34.5 hours (Table I). Of this time, 28.7 hours were devoted to professional activities and a total of 5.8 hours were devoted to personal activities and to meals on the job.

In the analysis that follows, the 34.5 hour week (including personal and meal time) is referred to as the observed working week and the 28.7 hour week is referred to as the professional week. In addition to the 34.5 hour observed working week, the surgeons reported a mean of 1.4 hours of additional professional activity in the evening prior to their day of observation.

Time in the observed working week was divided into two major activities—office and hospital activities—and a variety of miscellaneous activities (Table I). Approximately one third of the observed working week was spent in the office and almost one half of it was spent in a hospital. The remaining 15 percent of time was spent either traveling to and from the above locations or in a variety of other activities, such as house calls, nursing home visits, etc. Of the 12.0 hours a week



Table III. Distribution of mean reported professional evening time by type of activity\*

| Activity                     | Mean<br>reported time<br>(min.) | Standard<br>deviation | Median<br>time<br>(min.) | Percent of<br>evening<br>activities |
|------------------------------|---------------------------------|-----------------------|--------------------------|-------------------------------------|
| Reading journals             | 21.0                            | 34.4                  | 0                        | 24.6                                |
| Seeing hospitalized patients | 15.7                            | 12.6                  | 0                        | 18.4                                |
| Emergency room patient care  | 11.1                            | 47.0                  | 0                        | 13.0                                |
| Operating and assisting      | 8.9                             | 24.2                  | 0                        | 10.4                                |
| Other patient care           | 3.9                             | 13.7                  | 0                        | 4.6                                 |
| Communicating with           |                                 |                       |                          |                                     |
| Patients and families        | 7.2                             | 11.6                  | 0                        | 8.4                                 |
| Hospital staff               | 7.0                             | 13.3                  | 0                        | 8.2                                 |
| Colleagues                   | 3.4                             | 7.9                   | 0                        | 4.0                                 |
| Administration               | 7.4                             | 25.6                  | 0                        | 8.7                                 |
| Total                        | 85.5                            | 110.3                 | 60                       | 100.0                               |

\*N = 23.

in the office, 5.2 hours were spent in direct patient care and almost another hour was spent in indirect patient care. Of the remaining 5.8 hours a week in the office, 1.2 were spent in administrative activities and 4.6 in nonpatient care activities, primarily in personal activities and in waiting for patients to arrive.

Of the 17.2 hours a week spent in a hospital, more than two thirds (11.7 hours) was spent either rounding on patients or operating as primary or assistant surgeon (including operative support activities as dressing, scrubbing, etc.). An average of an additional 5 minutes of other direct patient care per week stemmed from one consultation on a surgical emergency. Almost an hour, however, was spent in indirect patient care activities in a hospital. Of the 8.1 hours of operating time per week, 5.6 hours (69 percent) were spent as chief surgeon, 2.0 hours (25 percent) as assisting surgeon, and 0.5 hour (7 percent) in ambulatory surgery. Thus for every 3 hours spent as chief surgeon, a surgeon in this population averaged slightly over an hour as an assistant surgeon. Surgical assisting was not included in the measurement of operative work in the previous study. Aggregating all three categories of operative time, 4.4 hours (54 percent) were spent actually operating (incision to closure), 2.5 hours (31 percent) in operative support activities, and 1.2 hours (15 percent) in waiting for an operating room to become available.

The small amount of ambulatory surgery suggests that its inclusion in the previous study would not have altered the order of magnitude of the measured operative work loads. This suggestion is borne out by the fact that the five ambulatory operations observed in this study were excisions of superficial lesions of skin and subcutaneous tissue, with a mean HE value of 0.19. Were a similar amount of ambulatory surgery to have occurred over the 48 week working year of the previous study, its inclusion in that study would have raised the median weekly work load by only 0.1 HE.

Of the remaining time spent in a hospital, the largest category was other nonpatient care, amounting to a mean of 2.4 hours a week, equivalent to 13.9 percent of all time spent in a hospital. Fifty-three minutes a week were spent in administrative activities in a hospital. This time was primarily devoted to hospital administrative matters, as opposed to those of the surgeons' own practices. Including this hospital administrative time, the total mean weekly administrative work load of the general surgeons equaled 2.2 hours. This figure is comparable to that reported for general surgeons by *Medical Economics* and amounts to only 6 percent of the observed working week.<sup>12</sup> This percentage is somewhat less than might have been anticipated in view of the complaints of many physicians of the growing administrative requirements of medical practice. Teaching activities amounted to 21 minutes a week spent

Table IV. Mean observed time at various activities for above- and below-median hernia equivalent (HE) groups

| Activity   | Mean minutes<br>per day<br>above-median<br>HE group* | Mean minutes<br>per day<br>below-median<br>HE group† | Ratio of mean time<br>per day of above-<br>median group to<br>below-median group | Level of statistical<br>significance of dif-<br>ference in mean<br>time between the<br>two groups |
|--|--|--|--|---|
| Office time                                      | 110.4  | 127.2  | 0.9  | NS‡   |
| Surgical care                                    | 58.4   | 41.9   | 1.4  | NS  |
| Nonsurgical care                                 | 10.1   | 14.8   | 0.7  | NS  |
| Administration                                   | 20.9   | 3.9  | 5.4  | 1%  |
| Other nonpatient care                            | 21.1   | 66.6   | 0.3  | NS  |
| Rounds time                                      | 47.3   | 24.0   | 2.0  | 5%  |
| Direct patient care                              | 25.3   | 12.4   | 2.0  | 5%  |
| Indirect patient care                            | 16.6   | 8.8  | 1.9  | 5%  |
| Operative time                                   | 116.1  | 47.2   | 2.5  | 5%  |
| Chief surgeon                                    | 89.9   | 22.1   | 4.1  | 1%  |
| Assisting  | 21.9   | 18.7   | 1.2  | NS  |
| Ambulatory                                       | 4.3  | 6.5  | 0.7  | NS  |
| Other hospital patient care                      | 13.8   | 6.1  | 2.3  | NS  |
| Other hospital nonpatient care                   | 25.4   | 25.9   | 1.0  | NS  |
| External travel                                  | 42.8   | 21.5   | 2.0  | 5%  |
| All administrative time                          | 36.8   | 6.2  | 6.0  | 1%  |
| Total observed time                              | 410.4  | 286.6  | 1.4  | NS  |
| Personal and meals                               | 48.2   | 69.4   | 0.7  | NS  |
| Total observed time net of<br>personal and meals | 362.1  | 217.2  | 1.7  | 5%  |
| Total surgical time                              | 239.9  | 120.3  | 2.0  | 5%  |

\*N = 14.

†N = 13.

‡NS = not statistically significant.

Table V. Comparison of selected practice characteristics observed for 14 general surgeons in community practice with practice characteristics of surgeons reported in the A. M. A.'s Seventh Periodic Survey of Physicians and Medical Economics' Continuing Survey of Physicians<sup>4, 12, 13</sup>

| Source of data on practice<br>characteristics of general<br>surgeons    | Average<br>total<br>work<br>week<br>(hr.) | Average<br>direct<br>patient<br>care<br>weekly<br>(hr.) | Average<br>hospital<br>rounds<br>and con-<br>sultations<br>weekly<br>(hr.) | Average<br>time in<br>operat-<br>ing room<br>weekly<br>(hr.) | Average<br>No. of<br>patient<br>visits<br>per week | Average<br>No. of<br>hospital<br>patient<br>visits<br>per week | Average<br>No. of<br>office<br>patient<br>visits<br>per week |
|---|---|---|--|--|--|--|--|
| Time-motion study of 14 general<br>surgeons in community practice*      | 44.3                                      | 25.2  | 5.4  | 9.1  | 111  | 43   | 42   |
| A. M. A.'s Seventh Periodic Survey<br>of Physicians (1971)              | 52.4†                                     | 43.7†   | ‡  | ‡  | 104†   | 40§  | 78§  |
| Medical Economics' Continuing Sur-<br>vey of Physicians (1971 and 1973) | ‡   | ‡   | 16.3¶  | 13.6¶  | ‡  | 42#  | 48#  |

\*Includes mean of daily evening observations multiplied by 7.

†For surgeons in Middle Atlantic region.

‡Data not reported.

§For surgeons in metropolitan areas.

||All statistics reported are medians.

¶All surgeons responding to survey, 1971.

#Suburban surgeons, 1973.

with residents in a hospital outside the community. The fact that all of this teaching was done by one of the newly arrived surgeons confirms the contention in the previous study that this population of general surgeons was virtually completely immersed in community clinical practice.

Fifteen percent of the observed working week was spent in a variety of other activities. The largest component of this time (3.2 hours) was spent in traveling between hospitals, offices, and other sites of professional activity. Over the course of a 48 week working year, this time for external travel would equal over four observed working weeks. Fifty-nine minutes of direct patient care per week were spent in schools, nursing homes, industrial plants, and in making the three house calls observed during the study. During the entire week, 26 minutes were spent interacting with the observer.

Over the observed week, a total of 14.2 hours was spent in direct patient care and an additional 4.3 hours in indirect patient care. Together these patient care activities accounted for 54 percent of the observed working week and 65 percent of all professional activities. Of the 14.2 hours of direct patient care per week, 89 percent (12.6 hours) were judged to be surgical in nature and 11 percent (1.6 hours) nonsurgical. Three fourths of this nonsurgical direct patient care occurred in the office, while the remaining one fourth was confined to various locations outside of a hospital. All direct patient care in a hospital, both on rounds and in the operating room, was judged to be surgical in nature.

Indirect patient care in a given location was classified as surgical or nonsurgical in the same proportion as the direct patient care delivered there. Thus all indirect patient care in hospitals and 81 percent of indirect patient care in offices were classified as surgical in nature. There was no indirect patient care at other locations. Accordingly, the total time devoted to both direct and indirect surgical care over the observed working week could be said to equal 16.5 hours, 48 percent of that week and 90 percent of all patient care.

The surgeons saw an average of 106 patients during the observed week. Forty-two of these were in their offices, 30 on rounds, and eight were operative patients. The remaining 26, for the most part, were seen in nursing homes, schools, or homes. Of the eight operative patients per week, the surgeons had primary inpatient operative responsibility for 5.3, performed an ambulatory procedure on 1.1, and assisted at an inpatient operation for 1.6. Thus for every patient for whom a surgeon had primary operative responsibility during the observed working week, he saw 6.6 patients in his office and 4.7 on rounds.

Of the total of 191 patients seen in the office during the course of this study, 80 percent (152) presented with surgical problems and 20 percent (39) with problems judged to be nonsurgical in nature. Twelve percent of the surgical patients were preoperative, 57 percent were postoperative, and 31 percent were judged to be nonoperative. The surgeons averaged 7.5 minutes of direct patient contact per office visit (Table II).<sup>\*</sup> There was no difference in the overall mean time spent per visit with surgical or nonsurgical patients. The surgeons, however, averaged over twice as much time (12.4 minutes) per preoperative visit as per postoperative visit (5.8 minutes) and 38 percent more time per preoperative visit as per nonoperative visit (9.0 minutes).

On rounds, the surgeons averaged 3.8 minutes per patient. Seventy-four percent of the patients seen on rounds were either pre- or postoperative and 26 percent were involved in a hospitalization not involving an operation. During the course of the study, 29 operations were observed in which the surgeons had primary operative responsibility. Twenty-four of these were performed on inpatients and five on ambulatory patients.

<sup>\*</sup>The actual time one surgeon spent in one office setting with each of 18 of the total of 191 office patients was not observed. All 18 of these patients were judged to be surgical in nature; the aggregate time with them was determined; and these data are included in the study where appropriate. Mean times per all patient visits and per surgical patient visits reported in this study are, however, based on the remaining 173 patients.



The mean HE value of the 24 inpatient operations was 0.98 HE. In addition, the surgeons were observed to assist at seven other inpatient operations. Of the total 31 inpatient operations thus observed, 17 involved one of the surgeons as an assistant. The mean HE value of these 17 inpatient operations was 1.54, 2.5 times greater than the mean complexity of the 14 inpatient operations not involving another surgeon as assistant (0.62 HE).

In addition to collecting information on 27 working days, information was obtained on the professional activities of 23 of the prior evenings. On the remaining 4 days, surgeons had no professional activities and were unavailable for inquiry. The surgeons reported that eight of the 23 evenings (35 percent) contained no professional activities. Of the remaining 15 evenings, six were reported to contain up to 1 hour of activities, eight from 1 to 4 hours, and one almost 8 hours. The median evening consisted of exactly 1 hour of professional activities and the mean evening 1.4 hours (Table III).

The variability in the performance of specific evening tasks was such that the median time devoted to each of the reported tasks was zero minutes. Thus each task was not reported to have been performed during at least half of the evenings. The largest single component of evening time, 21 minutes (25 percent), was spent reading journals. A mean of 16 minutes an evening was spent in seeing hospitalized patients and a mean of 11 minutes in delivering care in a hospital's emergency room. During the 23 evenings, 14 hospitalized patients were visited, slightly more than one every two nights. The bulk of the emergency room time was spent suturing four patients following an automobile accident. Of the 8.9 minutes of operative time per evening, 2.4 were spent as primary surgeon and 6.5 as assisting surgeon. One surgeon performed a release of an intussusception and an incision of a peripheral vessel while two others assisted on an appendectomy and a laparotomy. Four additional minutes were devoted to other forms of patient care. In addition, 18 minutes were

spent communicating with either patients and their families, hospital staff, or medical colleagues. In all, two thirds of the evening activities, 57 minutes, could be said to involve patient care, all of which was judged to be surgical in nature. Administrative activities (7 minutes) comprised almost the same percentage of evening as daytime activities (9 percent).

Given the high variability in the evening times reported by the surgeons, it is doubtful that the sample size is large enough to utilize the observed means with any degree of confidence. For instance, the 95 percent confidence interval of the mean evening ranges from 37 minutes to 2.3 hours. Tentatively utilizing the mean time for evening activities, nonetheless, and assuming seven such evenings a week (a total of 9.8 hours), the total working week for this population of general surgeons could be said to equal 44.3 hours and the professional working week 38.5 hours. Utilizing the mean of 57 minutes of patient care activities per evening and assuming again seven such evenings a week (a total of 6.7 hours), the total patient care time of this population of general surgeons over an entire week could be said to equal 25.2 hours and the total surgical time, 23.2 hours.

#### COMPARISON OF OPERATIVE WORK LOADS WITH THE UTILIZATION OF SURGICAL TIME

The HE of a surgical procedure is the ratio of the relative value of that procedure as listed in the 1960 Relative Value Studies of the California Medical Association to the relative value of an adult unilateral inguinal herniorrhaphy, as given in the same listing.<sup>6</sup> These relative values were established to provide guidelines for equitable fees and are basically a ratio of the median "customary" fee charged by practitioners for a specific procedure to the median "customary" fee charged for the simplest operative procedure (in the above listing, "puncture aspiration of abscess, subsequent"). Because these relative values were derived from fees actu-

ally charged by practicing physicians and explicitly contained within them provisions for postoperative care, we hypothesized in the previous study that they were a valid relative measure not only of the operative work associated with a procedure but also of all the surgical care associated with it. This hypothesis was supported by the finding that 93 percent of the variation in the relative values of a number of operations was explained by the variation in the mean operating room times and the mean lengths of stay associated with these procedures.<sup>8-10</sup> This finding facilitated the development of the HE scale and the measurement of the operative work loads of populations of general surgeons in different practice settings.<sup>8-10</sup> Before these operative work loads could be construed as valid measures of a surgeon's overall surgical output, however, the relationship between a surgeon's operative and nonoperative surgical work load needed to be established.

The results of this time-motion study of community surgeons can shed light on the relationship between the operative and the nonoperative work of surgeons by allowing a comparison of the annual operative work loads of the individual surgeons measured in the previous study with the time that they were observed to spend at various professional activities, both surgical and nonsurgical, in the present study. The validity of such a comparison is supported by the finding that the operative work loads of individual surgeons observed in the present study were significantly positively correlated ( $r = 0.65$ ) with their operative work loads in the previous study. To compare their operative and nonoperative work loads, the surgeons in the present study were divided into two groups based on whether their operative work load as measured in the previous study was above or below the median, 3.1 HE per week.\* Operative work loads were assigned to the two surgeons not in the previous study on the

basis of their age, their certification status, and their operative work loads in the present study. This placed both of them in the above-median group. On the basis of this median split, seven surgeons fell into each group. The above-median group contained 14 days of observation from the present study and the below-median group 13 days of observation. The time each surgeon spent on specific tasks on his days of observation was assigned to the appropriate group and the mean time for each task determined.

A comparison of mean times spent at specific activities by the two groups of surgeons (Table IV) demonstrates that the surgical component of patient care in major activities as office, rounds, operative, and chief surgeon time is for the above-median group at a minimum 1.4 times greater and as much as 4.1 times greater than the below-median group. In fact, the differences between the two groups for time on rounds and as chief surgeon are statistically significant. Even more important, however, is the fact that total surgical time aggregated across all categories of patient care is statistically significantly greater for the above-median group. These findings would tend to support the hypothesis that the hernia equivalent measure of operative work is, for community surgeons, a valid relative measure of all surgical output. Of note, the mean time spent assisting and in ambulatory surgery was not substantially different between the two groups. This finding suggests that surgical assisting in this community is associated with factors other than the size of a surgeon's primary operative work load.

Further examination of Table IV suggests that the HE measure is also sensitive in distinguishing net professional time on the job from total observed time on the job and in discriminating the surgical components of patient care time from the nonsurgical. The ability of the HE measure to reflect observed professional time and surgical time is indicated by the fact that although the mean total observed time for the above-median surgeons was 40 percent greater than the below-median surgeons, net professional time

\*For both the population of 19 general surgeons in the previous study and the 14 general surgeons participating in this study, the median work load as previously measured was 3.1 HE per week.



(total observed time net of personal and meals) was 67 percent greater and total surgical time twice as great.

A comparison of the mean time spent at various office activities by the two groups of surgeons reveals some interesting differences in practice patterns. The above-median surgeons spent 15 percent less time per day in the office than the below-median group, but devoted almost 40 percent more time there to surgical care. Correspondingly, they spent over 30 percent less time in nonsurgical care. The surgeons in the above-median group also spent almost 70 percent less time in nonpatient care office activities (for the most part, personal and waiting time) as the other group. Interestingly, the surgeons in the above-median group spent over five times as much office time and six times as much time overall in administrative activities as the below-median surgeons, both statistically significant differences. These findings, coupled with the fact that the above-median surgeons spent considerably less time waiting for patients in their offices, suggest not only that an increased administrative work load may result from an increased surgical work load but also that these administrative tasks may be accommodated by the more efficient use of otherwise dead time.

The two groups of surgeons were further compared by type of office patient seen and time per office visit. The above-median group saw twice as many surgical patients as the below-median group and slightly fewer nonsurgical patients. Proportionately, these nonsurgical patients comprised only one half as much of the office practice of the above-median group as the below-median group (15 vs. 30 percent), a difference statistically significant at the 5 percent level. This would tend to indicate that the surgeons in the above-median group may have a greater tendency either to attract patients with surgical complaints or to limit their office practice to surgical patients than surgeons in the below-median group. Since nonsurgical office patients are not subsequently hospitalized for surgery, they are not a component of the surgical work load as measured by the HE

methodology. Thus for surgeons with an equal number of office patients in similar practice settings, the HE methodology would appear to be able to distinguish among them as to the volume of surgical office patients seen.

The above-median surgeons devoted 21 percent more office time than the below-median group to patient care activities and, in that time, saw 64 percent more patients. It accordingly follows that the above-median surgeons spent less time per patient visit than the below-median surgeons. In fact, they spent 23 percent less time per patient visit and 26 percent less time per surgical visit than surgeons in the below-median group (Table II). This was primarily due to the fact that the above-median surgeons spent approximately only one half as much time per postoperative visit, which comprised almost half of their office practice. In each of the other categories of patient visits (with the exception of preoperative patient visits for which numbers are insufficient for comparison), they also spent less time per visit. Thus perhaps because of their heavier work loads or because they are more efficient in the handling of patients, the above-median surgeons would appear to be able to use comparable amounts of office time to handle larger case loads.

Thus the HE measure of operative work appears to have value in distinguishing surgeons in this population who are using their surgical skills relatively intensively from those who are functioning at diminished capacity. It also seems to be able to discriminate among surgeons in this population according to the amount of time they devote to professional activities, the amount of time they devote to surgical care, the number of surgical patients seen in their office, and the share of nonsurgical care in their practice.

## DISCUSSION

The finding in this study of a mean observed working week of 34.5 hours, containing 28.7 hours of professional activity, suggests that the limiting factor affecting the volume of the operative work loads as mea-



sured in the previous study was not the availability of professional time and tends to corroborate the inference previously drawn that there was possible underutilization of costly and highly specialized medical skills in the particular community.

The number of hours both observed and reported to be devoted to professional activities in the present study are striking in comparison with the number of hours reported for similar activities for presumably comparable groups of surgeons by both the American Medical Association's Periodic Survey of Physicians and *Medical Economics'* Continuing Survey of Physicians,<sup>4, 12, 13</sup> hours which have, for the most part, been construed to be the norm for American physicians. For virtually every category of activity, hours reported worked by surgeons in the two surveys exceed those found in our study (Table V).<sup>\*</sup> These differences range from a minimum of 8.1 hours between the A. M. A.'s mean practice work week for general surgeons in the Middle Atlantic States and our total work week, including evenings, to a maximum of 18.5 hours between our figures and the A. M. A.'s for "direct patient care" per week, equivalent to our "total patient care," differences of 18 and 73 percent, respectively. Similarly, *Medical Economics* reports that the median surgeon in their survey spent three times as much time on rounds and in consultations per week as the mean found in our study, as well as 49 percent more time per week in the operating room.

Some of these differences between our findings and those of the surveys could stem from both definitional differences as to where and when specific activities begin and end and from possible atypicality of the population of general surgeons in our study. The

potential contribution of possible atypicality in our population to explaining these differences appears lessened, however, by the rather remarkable agreement between our findings for the number of patients seen per week and those of the surveys. The A. M. A. survey reports that surgeons practicing in the Middle Atlantic region had 104 total patient visits a week. In our population, we found a mean of 106 total patient visits during the observed week and another 4.9 per week in the evening. Similarly, the A. M. A. reports 40 hospital visits per week for surgeons practicing in metropolitan areas and *Medical Economics* reports 42 hospital visits per week for suburban surgeons. In our population, during the observed working week, the surgeons saw a mean of 30 rounds patients and eight operative patients and another five hospital patients during the evening for a total of 43 hospital visits a week. The A. M. A. survey reports 78 office visits per week for metropolitan area surgeons and *Medical Economics* 48 office visits per week for suburban surgeons. We found, in our population, 42 office visits per week and an additional 26 patient visits at nursing homes, high schools, and on house calls, for a total of 68 nonhospital patient visits a week.

The differences between our findings and those of the two surveys in the number of patients seen per week overall, in a hospital or in an office are, with the exception of the A. M. A.'s report on office visits, of such a small order of magnitude that they suggest fairly similar practice patterns for the surgeons concerned. When contrasted with the differences in the number of hours worked, these similarities in the number of patients seen suggest, in addition to the previously mentioned possible definitional differences, the possibilities that (1) the surgeons answering both *Medical Economics* and the A. M. A. surveys spent substantially more time per patient in patient care activities than the surgeons in the community under study, or (2) there may be a substantial upward bias in the number of hours reported in both surveys.

Support for the hypothesis that there may be a substantial upward bias in the reporting

<sup>\*</sup>Our mean observed working week does not include Sundays, whereas the phrasing of the questions used in the surveys would appear to lead the respondents to include Sunday time. Additional information solicited from the surgeons in our sample, however, indicates that, with the occasional exception of rounds and the treatment of emergency cases, Sundays contain little professional activity. Therefore the multiplication of the mean reported evening time (1.4 hours) by 7 and its addition to the mean observed working week to obtain a total working week would appear to adequately account for any Sunday as well as evening activities.

of hours worked in the two surveys is found in the fact that each survey asks surgeons to report on their "most recent *complete*" week or their "last *full*" week, where "*complete*" and "*full*" are not defined. In the present study, we report our findings in terms of a "mean" week. This mean week is substantially less than the week reported in the two surveys, as there were a substantial number of short working days in our sample of observations (Fig. 1). For instance, 9 days were less than 4 hours in length. The modal working day, however, was quite long—between 8 and 10 hours of work. Projecting such a modal (full) day into a 5 or 6 day week would, in fact, yield a work week of 50 to 60 hours, not including evening activities. It is not unreasonable to surmise that the wording of the two surveys encourages the physician to focus on weeks containing an unusual number of full days as opposed to mean days and therein to bias upward his reporting of hours worked, particularly when frequently experienced long days are probably more likely to be recalled.

It is worth noting that the A. M. A. data indicate that, in addition to reporting longer work weeks, surgeons report spending almost 80 percent of their professional time in direct patient care activities. In our own study, however, in addition to observing substantially shorter work weeks, we found that only approximately 54 percent of the work week was spent in activities that we have defined as direct or indirect patient care. A very substantial amount of time, however, was spent in nonpatient care activities such as traveling, waiting, and meals—items that would appear to be common to most community practices.

If such reporting biases exist in these surveys, they are most likely not peculiar to surgeons. Further evidence for such possible upward bias in physicians' self-reporting is found in a study designed to measure the effect of universal health insurance on the utilization of Quebec physicians. In this study physicians were asked to report the amount of professional time in a typical week and then to report the same informa-

tion for the day immediately preceding the day they completed the questionnaire.<sup>7</sup> Weeks constructed from the individual days were, on the whole, approximately 10 percent shorter than the weeks reported as typical.

The finding of a positive relationship between the volume of the previously measured operative work loads of the surgeons in our population and the amount of time spent in surgical care supports the use of the HE methodology as a relative measure of the overall professional utilization of a general surgeon in community practice. Thus on the basis of this study, a reappraisal of the criticism of the HE methodology, as that of Chase,<sup>5</sup> that it overlooks important components of surgical care outside the operating room would appear to be in order. It is important to realize that the HE measure has been developed for general surgeons practicing in a suburban community. Time-motion analysis of their professional activities has verified that their practices are virtually completely clinical in nature. Accordingly, care should be taken in applying this methodology to surgeons whose responsibilities are not primarily clinical.

The time-motion methodology used in this study provides for definitive information on the practice patterns of physicians. For larger populations, analysis of these practices by variations in age, board certification status, the number of paraprofessional personnel employed, and other practice arrangements would appear to be warranted.

A finding of some interest in this study is the relatively small amount of nonsurgical care delivered by the surgeons, only 8 percent of all patient care. The low operative work loads in the previous study suggested the possibility of fairly large loads of primary care. The relatively small amount of such care in this population of general surgeons suggests that surgeons in such communities may be able to survive economically with relatively low total patient work loads.

One small irony emerges from this study. It was shown that the most productive surgeons spent 50 percent less time per post-

operative patient visit. At a time when patients are requesting deeper involvement from their physicians as well as decreased costs, such a finding is ironic if it implies productivity increases are to be associated with reduced physician-patient contact and therein possible alterations in the classical doctor-patient relationship.

We would like to thank Drs. Victor Fuchs, Kurt Deuschle, Michael Grossman, and Melvin Reder and Mr. Dennis Fisher for their help in completing this paper. We would also like to thank Mr. John Wolfe and Ms Phyllis Goldberg for research assistance, Mr. H. Irving Forman for technical assistance, and Ms Barbara Chamberlain and Diana Tummons for secretarial assistance. We are similarly indebted to Drs. Barbara Brody and Abraham Bergman for forwarding helpful materials from their time-motion studies. We would also like to thank most sincerely the population of general surgeons and their colleagues who have been unswervingly cooperative throughout these studies.

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Senator KENNEDY. Our final panel today consists of Dr. Herbert A. Holden and Dr. Herb L. Huffington.

**STATEMENT OF HERBERT A. HOLDEN, M.D., SAN LEANDRO, CALIF.,  
ACCOMPANIED BY HERB L. HUFFINGTON, M.D., WATERVILLE,  
MINN., A PANEL OF THE AMERICAN ACADEMY OF FAMILY  
PHYSICIANS**

Dr. HOLDEN. Mr. Chairman and members of the subcommittee, I am Herbert Holden, a practicing family physician from San Leandro, Calif. I currently serve as president of the 36,000-member American Academy of Family Physicians, and it is in that capacity that I appear before you today. As mentioned in your introduction, with me is Dr. Herb Huffington, who is chairman of the academy's board of directors. Dr. Huffington is a family physician practicing in Waterville, Minn.

The academy has appeared before this subcommittee several times in the past to present our views on health manpower legislation. It is not our purpose in appearing today to simply repeat that which we have previously stated, and I will attempt to keep my prepared remarks as brief as possible in order to insure that there is sufficient time to respond to any questions which you might have.

If you look ahead in our testimony to page 6, you will note there is a figure of some \$25 million which is the estimate of the Department of HEW as to the funds that are needed for family practice programs this year.

Obviously, the \$9.5 million that was available in 1975 is far short of that figure.

In regard to how this funding should be described in the health manpower legislation, we would like to emphasize that we feel it very important that family practice be designated by name as a line item in the legislation, and not simply grouped as a part of primary care.

You are aware that the Rogers bill, H.R. 5546, did contain such specific recommendation and wording. It refers to family practice residency programs and training programs in the general practice of dentistry.

The reason we are concerned that family practice be indicated by name is the fact that we feel that this discipline of medicine is the one ideally qualified to deliver the majority of health care to the people of America. We feel that we are preparing the type of physician that the public wants.

I have before me a recent published Morrison report which discusses prescription drugs and the physician. It gives statistics, citing as sources, the National Center for Health Statistics, Public Health Service, Department of HEW, which show that in 1971 there were a total of 999 million office visits to physicians in this country.

Breaking these down by percentage, 56 percent of those visits were to physicians in family practice or general practice. Some 9.8 percent of these visits were to pediatricians; 8 percent were to internists; 5.7 percent were to specialists in OB-GYN.

Thus you see that the majority of ambulatory health care in this country is being given by family physicians and generalists.

If we relate these figures to the number of practitioners in these specialties, as far as we can calculate them, we would find that the average family physician sees approximately 10,500 patients in office visits per year; the pediatrician sees approximately 9,600; the usual internist sees some 3,365. The obstetric gynecology specialist has an average of 4,368 office visits per year.

In addition to being the medical discipline giving the bulk of ambulatory health care to our people, we also feel that family practice offers the most efficient primary care. I would cite on page 5 of my testimony figures from a recent Medical Economics article.

There it again shows the relationship, that the average family physician sees 200 office visits per week, 168 for the pediatrician, 125 for the internist.

If we turn to page 6 and start in the middle of the indented paragraph, which is quoted, it says:

Number of patient visits is not the sole measure of a doctor's productivity, of course; many of the physicians with relatively few patient visits—notably M.D. internists—may be providing more complex services that require more time per visit. Nevertheless, the higher volume of the M.D. family practitioners—who work only slightly longer hours—does suggest greater efficiency. A possible reason emerges from the survey breakdowns of practice expenses—including medical assistants' salaries for self-employed soloists in each of the five fields. F.P.'s spend the most—a median of \$30,310.

So I would cite this factor of efficiency. I would also mention the matter of an increased savings in the cost of health care delivery by the administration of the family physician who knows the family as a unit and is used to ministering to that family usually for three and sometimes four generations. Intimate knowledge of the family often leads to a more appropriate and accurate diagnosis.

Family practice also solves health problems very directly, and may well avoid repetitive laboratory procedures, repetitive physical examinations, in many cases unnecessary hospitalization.

I would point out, too, that the broadly trained family physician is the only specialist who is ideally prepared to render medical care in areas of this country where other consultant physicians are not available.

I think that the statistics do show that the growth of the family practice movement is doing something to correct the geographic maldistribution that has existed.

If you turn to the appendixes to the testimony, you will see statistics that show the location of practice being chosen by graduates of family practice residencies in the last 2 years.

Of the graduates of 1974, some 35 percent chose to settle in communities of under 15,000.

In 1975, on the next page, if we combine the first two lines we have 35.1 percent of these family practice residency graduates settling in communities of under 15,000.

The highest percentage of all, 20.9 percent, went into communities with populations between 5,000 and 15,000.

If we total the figure for 2 years, we will find in excess of 50 percent of the family practice residency graduates went into communities with a population of under 30,000.

It is unnecessary, really, for me to point out that the family physician, with his broad area of training, can be supported economically



in an area where many of the limited specialists cannot survive and that he thrives in such a climate.

You were recently asking for some feedback on moneys that are being spent by the Federal Government in support of medical programs, and I think these figures do give you some feedback as to what the funds that have been allocated to family practice have accomplished.

Turning to the comments on the proposals that have been put forward to help relieve this geographic distribution problem, on page 8 we say that we do not believe that mandatory service in return for capitation payments to a medical school is the best approach.

We do support, on page 9, a proposal such as that set forth by Assistant Secretary Theodore Cooper that would be some reduction in the capitation support of medical schools with a corresponding increase in tuition levels, and then a generous loan program made available to the student at his option to help meet this tuition.

The student in turn would then be allowed to have this loan forgiven in exchange for medical care service in underserved areas.

Going on to pages 9 and 10, we comment that the Rogers bill, we feel, had much merit. By establishing a system to control the location, the number and the types of residency positions, attention could be focused on several problem areas. Since residency positions would be accredited according to types—with particular emphasis on residencies for physicians providing primary care—steps would be taken to insure proper specialty distribution.

Since residency positions would be accredited by area, steps would be taken to insure proper geographic distribution. And since the number of accredited residency positions would be limited to a percentage of the previous year's graduating medical school classes, steps would be taken to correct the current imbalance of foreign medical graduates practicing in this country.

As to continuing competence, you are well aware of the efforts of the academy in demanding continuing education for membership in our organization.

You are fully aware our specialty board is the only specialty board that has required rectification on a 6-year basis. We feel that others are following this program.

You know there are now special awards for continuing education offered by the AMA, and in many of the State medical societies. Also many of the State licensing boards are demanding a certain amount of continuing education for the maintenance of a license.

We think these are good positive steps. We think that they do tend to solve the problem of competence without the necessity of implementing a national licensure or relicensure system.

I believe that summarizes my testimony. In brief, I would again like to emphasize that we feel it is very important that in any health manpower legislation there be a specific designation of funds by name for the support of family practice departments in medical schools and in graduate residency programs.

We thank you for your attention and the privilege of being here. We thank you for your past actions in support of the Family Act and many other aspects of manpower legislation.



Senator KENNEDY. Thank you very much, Dr. Holden. I want to express my appreciation for these comments. It has been very helpful testimony. We are very close in terms of the approach on many of these issues, and I think it is very reassuring, at least from our point of view, to have this kind of input and general support which has been expressed in your testimony. For that we are very grateful.

I do not think I could let the testimony of those speaking for the American Academy of Family Physicians go by without recognizing the great leadership you have provided in the area of on-going continuing education. This has been something in terms of the quality issue for which you do deserve a great deal of credit. It is an example for all the other medical professions.

In terms of recertification, we find continuing education is of the utmost importance, and you have really paved the way, and I think the American people can be enormously satisfied in terms of the family physicians in that you have been responsible for this on-going continuing education program which is, I think, going to make an important contribution to ensuring quality medicine. I think you deserve a great deal of credit for that effort. I am sure it was not easy.

I want to thank you for the other references you have made in terms of some of the issues that we are dealing with, the geographic maldistribution. You talk about that and the question of capitation and student loans. I think you have provided some important help on that and all the questions about residency programs, for which we are very grateful.

I want to again express our appreciation. I think, as you well know, many of us here recognize obviously the very important role that the specialties play in terms of assuring quality health care to the American people, is something that I think all of us are committed to, but the practice of family medicine is right in the forefront, and I think they deserve the kind of help and support they have been given. I think it is terribly important and, quite frankly, speaking as a Representative of a State which I believe has the best in terms of medical care, in just about everything, still the people in those towns and communities are wondering about how to get hold of a doctor and what kind of service they are going to provide, and it is wonderful to know that we have the Academy of Family Physicians which is willing to respond to the kind of national problem that we are facing in a way in which I think is forthcoming and enormously enlightening and which is responding to a national need, and doing it in a very constructive way.

With that kind of background, I just want to tell you quite frankly I suppose it is a subjective judgment but I always give an even greater degree of weight and value to your comments in the whole area of health care because I think your people are really attempting to make an important contribution.

This is the kind of voice that I am terribly interested in listening to on a wide variety of different issues. I think it is a very powerful voice in terms of this hearing as we develop our policy.

Dr. HOLDEN. If I might make one more point, we appreciate that you have complimented us in what family practice has done so far.

We have a long way to go. As you can see from these figures, some 500 physicians finished family practice residencies last year. We do have a tremendous demand from the medical school students.

One of my duties this year as president is to visit medical schools, and I am very impressed with the dedication and the quality of the young men in training. They are very enthusiastic.

Senator KENNEDY. Young men and women.

Dr. HOLDEN. They are very enthusiastic. We have more applicants for family practice residencies than we can accommodate. In 1974, some 15 percent of the graduating seniors applied to family practice programs. That is slightly in excess of 1,800.

We have placed 1,200-some in first-year programs. In 1975, the percentage had gone up to 17 percent, a total 2,400 applied, and some 1,600 were placed.

Senator KENNEDY. If there were more residencies, you could place them.

Dr. HOLDEN. We certainly could, yes.

Senator KENNEDY. We are going to try to help you get them.

The subcommittee stands in recess.

[Whereupon, at 1 p.m., the subcommittee recessed, to reconvene at the call of the Chair.]

# HEALTH MANPOWER LEGISLATION, 1975

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## Maldistribution of Health Manpower

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WEDNESDAY, OCTOBER 29, 1975

U.S. SENATE,  
SUBCOMMITTEE ON HEALTH OF THE  
COMMITTEE ON LABOR AND PUBLIC WELFARE,  
*Washington, D.C.*

The subcommittee met, at 10:12 a.m., in room 4232, Dirksen Senate Office Building, Senator Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy and Taft.

Staff present: LeRoy G. Goldman, professional staff member; and Jay B. Cutler, minority counsel.

Senator KENNEDY. The subcommittee will come to order.

We are continuing a series of hearings on ways to meet the health manpower needs of this country.

This is the fifth day of hearings on this important legislation.

I believe the health manpower legislation is, in fact, the most important legislation to be considered by the subcommittee this year. The significance of the legislation stems from the extent of the health manpower problems plaguing our health care system.

A litany of these deficiencies is impressive:

We do not have enough doctors in rural areas. Sixty percent, 312 of 510, of the State planning areas have an inadequate supply—less than 100 M.D.'s per 100,000 residents—of physicians. The aggregate shortage of physicians in these 312 State planning areas exceeds 22,000 doctors.

More than 50 percent of the counties in the Nation had fewer doctors in 1970 than in 1960. Thirty-five percent of physicians now practicing in rural counties are over 55 years of age and are expected to retire within 10 years. This will increase the shortage of physicians in rural areas by an additional 8,000 doctors.

The supply of physicians in innercity urban areas has declined continuously since World War II. The number of physicians in the innercity area of one city, Chicago, declined by 30 percent between 1950 and 1970. Innercity areas now have fewer than one-quarter of the



physician supply of the affluent suburban areas. More than 10,000 additional physicians are needed in innercity areas.

We do not have enough family practitioners and other primary care physicians. The American Medical Association has stated that 50 percent of new physicians should be in the primary care specialties. In the large prepaid group practices, 65 percent of physicians are in the primary care specialties. In Great Britain, the share is 75 percent. But only 38 percent of physicians in the United States are now practicing in the primary care specialties. Only 31 percent of physicians now in training are in the primary care specialties.

Board certified surgeons in some areas now perform as few as 4 hours of surgery a week. The American College of Surgeons has called for a 23-percent reduction in surgical training positions.

One-third of the interns and residents in the country are graduates of foreign medical schools. In 1973, in 18 States, more than 50 percent of new physician licenses went to foreign medical graduates. The quality of care provided by many foreign trained physicians is suspect, at best. Only 20 percent of foreign medical graduates entering the country can pass parts I and II of the National Boards examination. Many do not speak good English.

Our physician licensing system is inadequate. Only 12 physicians lost their licenses for malpractice or incompetence in 1973.

The evidence of problems in our manpower supply system is endless.

The legislation which we are considering here today must deal effectively with these problems.

Last month, a new administration position was presented to the subcommittee by Dr. Theodore Cooper. At that time, Dr. Cooper presented a program which I believe can serve as the basis for compromise legislation which does deal effectively with these problems. A number of details of Dr. Cooper's program will need to be perfected, but the basic proposal seems sound.

I intend to introduce the administration's bill as soon as it is drafted. I am hopeful that most, if not all, of the members of the subcommittee will be cosponsors of it.

Today we will hear from representatives of consumer organizations: The American Federation of Labor—Congress of Industrial Organization; the American Federation of State, County, and Municipal Employees; the National Senior Citizens Council; and a panel of representatives from Protestant churches.

We hope that their presentations, particularly their comments on the administration's proposal, will assist the subcommittee's effort in this important area.

Our first witness this morning is Mr. Bert Seidman, director of the Department of Social Security of the AFL-CIO. At the present time, he is a member of the Health Insurance Benefits Advisory Council, the Board of Trustees of Group Health Association of Washington, D.C., the Blue Cross Advisory Committee, and the Advisory Council on Employee Welfare and Pension Benefit Plans.

Mr. Seidman is a prominent spokesman of the organized labor movement in this country and an old friend of this subcommittee.

**STATEMENT OF BERT SEIDMAN, DIRECTOR, DEPARTMENT OF SOCIAL SECURITY, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS; ACCOMPANIED BY ROBERT M. McGLOTTEN, LEGISLATIVE REPRESENTATIVE, AFL-CIO, AND RICHARD E. SHOEMAKER, ASSISTANT DIRECTOR, AFL-CIO**

Mr. SEIDMAN. Thank you very much, Mr. Chairman.

My name is Bert Seidman, and I am director of the Department of Social Security of the AFL-CIO.

With me this morning is Robert McGlotten, who is a legislative representative of the AFL-CIO, and to my right is Richard Shoemaker who is assistant director of the Department of Social Security of the AFL-CIO.

Mr. Chairman, on behalf of the AFL-CIO, I wish to thank you for the opportunity to present our views regarding the various health manpower bills before this subcommittee, including S. 989, S. 990, S. 991, S. 992, S. 996, S. 1357, and H.R. 5546, the House-passed bill.

Mr. Chairman, I have a prepared statement.

Senator KENNEDY. We will include your statement in its entirety in the record at the conclusion of your testimony if it is necessary.

Mr. SEIDMAN. Thank you, Mr. Chairman.

One need not be a health manpower expert to realize America is experiencing a health care crisis. We are not experts but, as consumers, we realize the problems we face when we need and seek health care.

Our members, as consumers, realize this crisis when they cannot obtain needed medical care they can afford even though they are covered by negotiated health benefit plans.

This difficulty may be attributed to maldistribution of physicians by geographic area, one of four serious problems that we will discuss in outlining the health care crisis in this country. Maldistribution by geographic area is twofold—it exists among various regions and States within the United States, and it exists in the lack of physicians and other health manpower in inner city and rural areas.

The State of New York has 265 percent more physicians than does Mississippi on a per capita basis. However, even though New York State has a ratio of over two physicians, 2.36, per 1,000 persons, in the poverty areas of New York City, that ratio drops to 0.65 per 1,000.

The physicians are clustered in metropolitan rather than in rural areas, and in the more affluent or suburban areas of those cities. This maldistribution did not happen overnight. It is a trend that shows no signs of improving.

Over the last decade, the number of physicians in rural areas has decreased. In Kansas, for instance, between 1963 and 1970, 50 of the 105 counties lost physicians, and all those 50 counties were rural. Many of the other rural counties have physicians over 60 years of age. When these physicians retire or die, replacements are questionable. This is not an uncommon situation for many other rural areas in the United States.



Geographic maldistribution would be enough of a problem, but it is compounded by maldistribution of specialties. In 1940, 8 of every 10 medical students went into general practice. Now, 9 out of every 10 go directly into specialty training.

There are fewer and fewer physicians doing what most people need to have done when they seek health care—primary care consisting of checkups, treatment for colds, flu, minor upper and lower respiratory tract infections, pre- and postnatal care and postoperative treatment. Indeed, many of these health care services could be more efficiently performed by allied health professionals, such as paramedics and nurse practitioners.

General practitioners—they are called family practitioners now—can take care of 85 percent of the medical care needs of the population with better coordination and less cost. Yet we have the paradox that only 15 percent of medical students are being trained to take care of 85 percent of the population's medical care needs, while 85 percent of them are being trained to take care of 15 percent of America's health care needs.

Even if family practitioners, internists, and pediatricians are lumped together as primary care physicians, less than 50 percent of the Nation's physicians are trained to take care of, perhaps, 90 percent of the people's health needs.

Continuity in care, which is both physically and psychologically important to a patient, is lost in a fragmented health delivery system that shuffles him from specialist to specialist.

The overabundance of specialists was brought to light recently at hearings held before the House Subcommittee on Oversight and Investigations, when a number of members of the medical profession stated their belief that an oversupply of surgeons contributed to the shocking amount of unnecessary surgery being performed in this country each year.

There is an increasing reliance on foreign medical graduates (FMG) to provide health services. Over 20 percent of the active physicians in this country are FMG's and we believe this is another complex aspect of the health care crisis.

No standards exist currently which insure that the quality of FMG's is comparable to graduates of American medical schools. No specific test for oral and written competence in the English language is required. We are very much concerned by what amounts to a dual standard of care in many settings.

The practice of medicine requires subtle interpretation of the patients' physical and psychological status as well as clear communication between doctor and patient. The quality of care provided by large numbers of individuals who do not speak English well, let alone understand the intricacies of the American culture, must be questioned.

The influx of FMG's further contributes to the maldistribution problems. Only 10 percent are in family practice and most are concentrated in metropolitan areas.

The majority of foreign medical graduates currently entering the United States are from developing countries in Asia. We are concerned that these physicians are leaving countries where they are sorely needed.



A 1972 study of the problem noted that there are more Thai medical graduates in New York than serving all of Thailand's rural population of 28 million. Other third world countries are in similar situations where sizable proportions of their graduates leave for more lucrative practices in the United States.

A country like Thailand needs the talents of its educated medical professionals to meet the terribly unmet health care needs of its own people. We oppose any health manpower policies that contribute to a brain drain from developing countries.

We noted that different requirements for medical licensure exist within States for foreign graduates and U.S. graduates. This brings up the fourth major component of the health manpower problem, licensing and relicensing standards.

We are concerned with the entire issue of licensure because a lack of uniformity of requirements exists among States. Some States require internships and residencies while others do not. States set different levels of passing for qualifying examinations. Only four States require U. S. citizenship. This lack of uniformity contributes to maldistribution by limiting physician mobility between States.

More important is the whole question of quality. As consumers, we commit our most important possession to a physician when we seek service—our health. We trust that person to give us the best medical care possible based on current practices and research. Licensure and relicensure based on uniform standards insure that every citizen receives such care.

George Meaney, president of the AFL-CIO, has aptly remarked concerning relicensure :

Too many operations are performed by doctors who lack the skills, the education, and the experience. Once doctors get their license to practice, they are in forever. They do not have to undergo periodic reexamination or take continuing education courses—both of which are required for steamfitters, pilots, and a host of other workers. If other workers must upgrade their skills, why not doctors? After all, people are at least as important as pipes.

Relicensure of all physicians must take place on a regular basis, following uniform standards.

The present health manpower legislation has been inadequate in addressing the problems we have outlined. The loan provisions section of the Public Health Service Act, section 741, attempted to offer graduates of medical—including medicine, osteopathy, and optometry—dental and veterinary schools forgiveness of loan payments for service in the National Health Service Corps or in an underserved area. A student could receive a maximum \$3,500 loan each year for 4 years, and 30 percent of the loan and interest would be forgiven for the first year of service in NHSC, another 30 percent for the second year, and 25 percent for a third year of service.

This 85 percent forgiveness, however, was instrumental in getting only a handful of students to enter NHSC. About 30,000 medical and dental students received student loans between 1965 and 1972. Of that total, only 86 physicians and 133 dentists had obtained even partial cancellation of their loan for practicing in a shortage area by the end of 1973. This is less than 1 percent of the students who received loans. With the high incomes most physicians make, the loans were too easy to pay off with their 3-percent interest rate and 10-year repayment period.

Present legislation does not begin to address specialty maldistribution. It emphasizes increased financial assistance to health professional schools, in order to increase the supply of physicians. This is based on the theory that increasing the supply of physicians would lead to competition and result in an increased flow of doctors to rural and inner-city areas and to the primary-care field.

But the theory has been a woeful failure in practice because geographic and specialty maldistribution has continually worsened despite billions of taxpayer dollars pumped into medical schools to turn out more physicians.

Many economists have noted that the health care industry does not fit the classic competitive model. If supply and demand meant anything in the medical care market, physician fees in Washington, D.C., should be the lowest in the country with its ample supply of doctors—1 for every 296 persons. On the other hand, the undersupply of doctors in rural areas should mean, by supply and demand analysis, that their fees and incomes should be higher than their urban counterparts. Yet, the reverse is true.

The oversupply of surgeons has not resulted in lower incomes for surgeons. Rather, it has resulted in more surgery. Surgeons in the United States operate twice as much in relation to population than they do in England. Doctors have not flocked into primary care practice because, for a number of reasons, it is not as attractive as specialty practice.

Increasing the number of physicians in an area does not necessarily mean adequate care will be provided to the residents of that area. For example, the District of Columbia is richly endowed in health resources. As previously mentioned, the District of Columbia has the highest physician-to-population ratio in the United States. It has three medical schools with their associated research and clinical facilities, as well as the world renowned National Institutes of Health—the acknowledged world leader in biomedical research. Yet, infant mortality rates in the District exceed the national average.

Clearly, the more than ample number of physicians in the District has failed to provide adequate screening, diagnosis, therapy, and followup for the population served. In short, the problem in the District is not a lack of resources but a lack of organization of these resources in any effective way. This lack of organization in resources characterizes the Nation's health care system in general.

The problems are currently so serious that more effective programs are imperative. When we deal with any health issue, we are, in essence, dealing with human lives. Those lives all need health care at some time; some need it desperately right now. They all deserve health care—easily accessible, high quality, and economical.

While the need is great, we must take careful, well-planned steps to achieve health manpower goals, assuring the rights of doctors, patients and taxpayers.

Mr. Chairman, the AFL-CIO would vigorously oppose any measure which sought compulsory service from doctors. No matter how worthy the cause, involuntary servitude has no place in a free society.

Freedom and fairness in the workplace run with the grain of American ideals and have long been a value and goal of the AFL-CIO.



We believe that legislation which offers attractive and strong incentives will motivate health professionals to perform their services in the geographic areas and specialty fields in which they are most needed. The proper mix of incentives and disincentives aimed at relieving the critical problems in health care will accomplish society's goals in health manpower.

All of the bills under consideration by the subcommittee address themselves to the problems we have discussed here today. Each bill has its good points, and while we do not endorse any one bill, we believe that, by taking the best provisions from each, Congress can enact excellent legislation.

We favor stronger incentives in the form of increased scholarships for students in schools of dentistry, medicine, optometry, podiatry, public health, health care administration, pharmacy and geriatric medicine. We would like to see all of the current scholarships programs consolidated into the National Health Service Corps (NHSC) Scholarship Training Program.

The current physician shortage area scholarship program which provides \$5,000 grants per year to medical students for services in designated shortage areas could easily be consumed by NHSC. We would support the provision in S. 991 for repeal of unconditional health professions scholarship programs which place no requirements on students. Instead, we would like to have such students transferred to NHSC scholarships.

The NHSC scholarships should be liberal, along the lines of S. 991, which provides \$5,000 for living expenses—adjusted for changes in the consumer price index—plus the tuition cost, not to exceed \$7,500. Part of this additional amount can be defrayed from the reduction in capitation payments which we are recommending.

We favor the service requirement found in H.R. 5546, S. 992, S. 1357, and S. 990, which provides for 1 year of service in a shortage area for each year of assistance with a minimum requirement of 2 years.

The current law's penalty for failure to fulfill the service requirement is repayment of the amount of the scholarship plus interest within 3 years. We would favor the stronger disincentive found in all the bills except S. 989 and S. 996 of double payment plus interest. S. 991 has the shortest payback period which is 1 year, but we would suggest even a shorter period of time as an added disincentive to "buy out." The current program has made it too easy for graduates to "buy out" leaving communities which needed and expected Corps personnel without them.

We would strongly favor the added incentive for Corps personnel found in all the bills except S. 996 of extra monthly pay up to \$1,000 per month to make the pay of Corps physicians competitive with income from private practice in the area. Scholarship recipients providing required service would be eligible for such pay after completion of their term of service. This is an attractive incentive not found in the current law.

H.R. 5546 and S. 992 provide for release from the requirement for service in a shortage area by alternative service as a private practitioner to a medically underserved population. We oppose such a provision, particularly since it authorizes grants for individuals to set up a private practice.



The Secretary of HEW should continue to designate medically underserved populations and assign personnel with the consultation of local medical and dental societies. All the bills except S. 996 require consultation with State health planning agencies. We favor this since the planning law provides for consumer input into the planning process and aids in efficient organization of health care delivery.

We favor the provisions in the various bills which call for more effort to match assignees with areas needing health care. We especially favor the provision in S. 992 that requires NHSC personnel to be assigned as part of a unit of health personnel, including at least four doctors of medicine and of osteopathy. The AFL-CIO has long supported a team approach as the most efficient and economic method of health care delivery.

While we support increased scholarships with a consequent reduction of capitation grants, we do not want to see these grants to medical schools eliminated entirely. Capitation grants provide incentives to the health professions schools to begin or expand programs in certain areas that help alleviate health manpower problems.

For eligibility for capitation grants, H.R. 5546 requires increases in enrollment or training programs for medical or dental students in geographically remote areas. A minimum of 50 percent of graduates must receive at least 6 weeks training in such areas. S. 1357 requires medical schools to establish administrative units to provide clinical instruction in family medicine or primary care with an increasing percentage of residencies in those fields—20 percent and 45 percent respectively by 1977. We support such a provision since it attempts to combat the problem of overabundance of specialists, but we would hope those percentages in residencies might be even higher—at least 50 percent—by 1979.

S. 989 adds schools of public health and graduate programs in health care administration to the list of eligibles for capitation grants. We favor this because such programs educate students about the organization and delivery of health care—an increasingly important component of the whole health picture.

We favor construction grants with priorities as found in S. 992. The emphasis is on projects which provide ambulatory care in conjunction with primary care training. Priorities should be in terms of facilities for outpatient care and/or in remote areas.

We would urge that special project grants continue for specific programs such as interdisciplinary training in S. 989 so efficient health care may be learned through a team approach.

S. 1357 and S. 989 provide grants for establishment and operation of clinical training centers in underserved areas. Students who have experiences in such areas during their education are more likely to continue practicing in underserved areas than those whose training emphasizes acute care in university hospitals.

We would favor provisions of S. 989 and S. 1357 which provide grants to schools in financial distress, including schools of public health and health care administration. Existing health manpower facilities and programs should not be curtailed for lack of emergency funding.

We favor the grants for area health education centers found in all the bills except S. 996. These centers are community based, train health

personnel who are often residents of the area, and provide education in organized delivery systems. We believe they are an excellent approach to community health care.

We favor grants for special programs for disadvantaged students so they can enter the health field. H.R. 5546 and S. 992 authorize grants for identifying such individuals, providing preadmission education and facilitating entry into schools. Education in the health field should be open for all persons. We deplore any attempts at discrimination, latent or manifest.

We favor grants for bilingual health training centers as proposed in S. 989, S. 992 and S. 1357 to provide for centers which would be established in communities with large populations with many persons who have limited English speaking ability.

We also support the provisions in H.R. 5546 for project grants for instruction of doctors in family medicine, training of physician assistants, dental auxiliaries and allied health personnel. The AFL-CIO has been instrumental in developing and encouraging programs for advanced training of allied health personnel. We believe allied health personnel characteristically have been underpaid and have not had career ladders available to them.

We favor the provision of S. 989 that requires the Secretary, with recommendation from the National Council on Post Graduate Physician Training, to establish the total number of residencies as well as the number of residences by specialty. Since the professionals have not regulated their own flow, it is necessary for the Secretary to do so.

Authority for all these bills should be delegated to the Secretary or his designated HEW Central Office Administrator (S. 989, S. 1357) and not to the regional offices, because the number of residencies varies tremendously by region. The problem, therefore, must be tackled nationally.

S. 992 and S. 1357 amend the Immigration and Nationality Act to prohibit admission of alien members of health professions unless they pass parts I and II of the National Board of Medical Economics Examination, demonstrate competency in oral and written English, and their admission does not lead to a surplus in a specialty or geographic area. We strongly favor this provision as we want high quality service from all health care personnel.

S. 989 is the only bill with provisions for licensing and relicensing. It requires the Secretary to establish national standards for these procedures. Licensure renewal would take place once every 6 years. States would be responsible for enforcement and may add additional requirements.

We strongly support these provisions, but feel that section 799D(c) of S. 989 is too harsh in that it suspends the license of a physician who has not fulfilled an obligation under a service commitment. We believe licensing should be solely an assurance of quality and not a punitive measure.

We favor the establishment of a data bank on health professions personnel, as detailed in S. 989. The Secretary needs to know the status of the profession to better adjust programs and foresee change so America is not caught in a health-care bind because of manpower problems.



In summary, Mr. Chairman, we would recommend legislation that, through emphasis on scholarships, provides strong incentives for students to volunteer to serve in NHSC.

Scholarship recipients should be required to provide at least 2 years of service in medically underserved populations subject to a payback disincentive of twice the scholarship amount with interest which would have to be paid in less than 1 year after graduation. We would like to see schools reserve 50 percent of their freshman slots for students who choose this service.

We favor continued, but reduced, capitation grants to schools which increase enrollment, reserve 50 percent of their residencies in primary care by fiscal year 1979 and establish teaching units in family medicine/primary care.

We recommend continuation of project grants to schools for programs for disadvantaged students, area health education centers, programs stressing the team approach and other projects aimed at relieving the major health care problems the Nation faces. We recommend the continuation of construction grants for primary care training facilities and for construction necessitated by enrollment increase requirements. We recommend amendment of the Immigration and Nationality Act for uniform testing—English and parts I and II of National Boards—of alien doctors with consideration for their effect on the geographic and specialty maldistribution problems. We recommend the Secretary establish residency positions by specialty. We think it is important that national standards for licensure and relicensure be established for all physicians. We further believe that the competence of all physicians be reviewed at least every 6 years.

Mr. Chairman, this subcommittee and the Senate Committee on Labor and Public Welfare have the opportunity of making a major contribution to improving the health of all Americans.

By providing adequate financial support for expanding health manpower resources and by providing incentives to bring about a better geographic and specialty distribution of health professionals with quality licensure, health services can be made more accessible and better adapted to the needs of the American people.

We urge prompt action on this legislation.

Thank you, Mr. Chairman.

Senator KENNEDY. Thank you very much.

I want the record to show the presence of Senator Taft, who is extremely interested in the whole manpower problem and worked very closely with the formation of the legislation last year, as did Senator Beall.

Senator Taft has been extremely interested in this issue and we welcome his participation this morning.

We want to thank you, Mr. Seidman, for your comments. In his testimony last week, Dr. Cooper talked about expanding the number of residencies in primary care to 50 percent by giving HEW some influence on the types of residencies, of doing something about licensure, and also of getting stronger control in terms of FMG's quality and ability to speak English. He was very much the kind of ballpark you and I consider to be essential.



I wonder, in your statement you suggest that the administration's level of 25 percent for the corps is inadequate, is that correct?

Mr. SEIDMAN. Yes; we think it ought to be established at higher levels and reach 50 percent no later than fiscal year 1979.

Let me say, however, that we, as you, welcomed Dr. Cooper's testimony. We think that it represents a considerable step forward on the part of the administration and an indication that if Congress enacts effective legislation, that there would be a good chance that it would be approved by the administration.

Senator KENNEDY. You would also include the osteopathic students as well? Include 50 percent for those students as well?

Mr. SEIDMAN. Yes; we would, and we think that perhaps in other categories some consideration should be given to this as well, that is making sure that the underserved areas have adequate supplies of other categories of professionals as well as the allied health personnel.

Senator KENNEDY. One of the things that we have to do is to work within a dollar limitation. The budgetary problems, at least in working with the administration at the present time, are very great. We are going to report a program that will only provide an increase in the total amount of money that will be authorized of 10-percent increase over the previous year. So we are not going to get the dramatic changes that we might like to see, that are entirely reasonable, quite frankly. So we must provide for the redistribution of some of these funds, as you understand, from the capitation to the scholarships, and some reduction in the area of construction funds.

I wonder, in terms of the reallocation of funds, more toward the scholarship and somewhat less for capitation, and construction, I am just wondering if you are satisfied with the way that we are proposing to allocate the resources under the general title of health manpower? Are you concerned about that?

Mr. SEIDMAN. Yes; in general, we are. We are concerned that the funds which are set aside for the development and expansion of health manpower are used in the most effective way possible to meet the health manpower needs of the Nation, and we think that those lie principally in two areas.

One, we think that there is an overabundance of specialists and nowhere near enough physicians and other professionals providing family care and primary care in general.

Second, we think that there is a very acute shortage of health manpower in the rural areas and in the inner city areas.

We think that by putting the emphasis on scholarships and considerably less emphasis in terms of the funds that are available on capitation, that the legislation can build in the kinds of incentives and disincentives which can help to meet health manpower goals.

Until now, with emphasis on capitation rather than on scholarships, it has been impossible to develop those kinds of incentives, and that is why some people have thought of the possibility of using an out and out compulsory system. We are opposed to that.

We think by building in the proper incentives and disincentives, it is not necessary to establish a conscription of medical school graduates.

Senator KENNEDY. I think you have outlined in your testimony your view of the paybacks or buy-out provisions. You favor a rather

strenuous buy-out provision. Could you just review those with us now?

Mr. SEIDMAN. We are urging, as a number of the bills provide, that the students who undertake or who get a scholarship with the understanding that the student is supposed to go into an underserved area after his or her graduation, and reneges on that obligation, should have to pay back twice the cost of the scholarship, with interest, in a relatively short time.

Frankly, we think students who undertake this obligation should be made to understand that they have a serious obligation which they are expected to discharge, and if their intention is not to do this, that they either should not seek to get the scholarship or that they should go into some other field.

But we think this is necessary to assure that these manpower goals will be met.

Senator KENNEDY. And if they serve for a year or two, you would have a proportional reduction based on a year for a year service, is that correct?

Mr. SEIDMAN. Yes.

Senator KENNEDY. And you are satisfied as to the legality of the double payback? That has been raised before.

I do not know whether this was raised in your own considerations of this issue.

Mr. SEIDMAN. Well, it does seem to me that penalty payback provisions are not that rare. I mean, they do occur in many types of contracts and, therefore, it would seem to me that this is not all that unusual.

Senator KENNEDY. Now, can you tell whether there ought to be a requirement that the NHSC scholarship funds be first priority for expenditure of appropriated health manpower funds?

What is your view on that?

Mr. SEIDMAN. We would favor this. We think that the funds should be used wherever possible and with priority being given to meeting the most acute health manpower needs. We think that it is through the NHSC that these needs can be met.

Incidentally, we think they can be met not only for the period of time that the student is there, but also we think that it will encourage, many of them at any rate, more than now, to remain in these areas once they have been there for a certain length of time. So that it is not only in the short term but also in the long term.

Senator KENNEDY. And there are some interesting results on that now taking place with the National Health Service Corps.

Mr. SEIDMAN. Yes.

Senator KENNEDY. Let me move toward the specialty area.

It has been suggested by AMA and CCME and other groups that 50 percent of our new physicians should be in the specialties of family practice, general internal medicine and general pediatrics.

Would you support that?

Mr. SEIDMAN. Yes; we certainly do.

Senator KENNEDY. How are we going to get to the 50-percent goal?

Do you think we should have some sort of system to allocate residency physicians?



Mr. SEIDMAN. Yes.

We have recommended that be done. We also think that the medical schools should be required to allocate their training slots in that way and that this be a condition of the receipt of capitation.

Senator KENNEDY. How should we set up that system?

The House subcommittee suggested that the CCME should have the responsibility. Last year, this committee proposed that a council be set up within the Department of HEW to administer a program.

What system would you prefer?

Mr. SEIDMAN. We would favor the latter, that it be done within HEW, but this is a matter which obviously is of very great concern to the medical profession and, therefore, we would expect that there would be an advisory committee or something of that kind so that there would be very effective and intensive consultation with the medical profession.

Senator KENNEDY. It seems to me to make sense to establish a group within HEW to draw from the best of various proposals that are made by the CCME and other interested groups and then make a determination on the matter. This, as you understand, has been one of the points of controversy over the past year.

We want to follow that closely.

The American Academy of Family Practice has suggested there be larger grants to support the development and operation of training programs for family practice.

What is your view on that?

Mr. SEIDMAN. We are in favor of returning programs to family practice. We think there should be financial incentives to develop those programs.

Senator KENNEDY. What about foreign medical graduates?

Representatives from CCME and the administration have suggested that the exchange visitor program be restored to its initial purpose of training better physicians from the developing nations, and that preferences for the immigration of physicians be terminated.

Would you support this?

Mr. SEIDMAN. We are very much concerned about the whole problem of the foreign medical graduates. We are not interested in discriminating against foreign medical graduates, but we are aware of two things.

One is that we think that this country should be very, very much concerned about whether it is robbing developing countries of medical personnel that they desperately need to meet their own needs, and we think that this is something that certainly should not continue very long on the scale which we now have.

Second, we are concerned that some of these foreign medical graduates which do not have the same technical training that our graduates have, that is graduates from the American medical schools, and furthermore do not have sufficient knowledge of English, particularly everyday spoken English, to be able to communicate with patients.

We hear these complaints from people who have to get their medical care from these foreign medical graduates over and over again that there is a lack of communication which can sometimes be very harmful to the patient, so that we think that it is necessary to amend the



Immigration and Naturalization Act to establish uniform testing in English of doctors from abroad and, incidentally, to make sure that those doctors from abroad who are admitted are admitted in such a way that they contribute to eliminating our shortages, both in terms of specialties in geographic areas, rather than exacerbating our maldistribution.

Senator KENNEDY. What about the licensing problem?

You have mentioned that in your testimony.

Some people think we should not include licensing provisions in a manpower bill.

Do you think we should consider licensing in a manpower bill? If so, how important do you think it is?

Mr. SEIDMAN. Well, in the first place, we think it is very important from the standpoint of establishing the quality of medical care and also in terms of bringing about a better distribution of medical care because of health professionals, because part of the problem is we do not have a uniform licensing and, therefore, they cannot go from one State to another.

But specifically on the question that you raise as to whether this is appropriate in the health manpower bill, we think that it definitely is.

What is involved in licensure and relicensure essentially is education, that is in order for doctors and others to be able to meet the standards that are required in licensure and relicensure, they have to know their business, and if they do not, they are not going to be able to do it.

So it seems to me the whole question of licensure and relicensure is very directly connected with the education of health manpower.

Senator KENNEDY. Senator Taft.

Senator TAFT. Thank you, Mr. Chairman.

Mr. Seidman, I appreciate very much your testimony here this morning. I think you have been very candid in your remarks, particularly directed, I think, toward the many problems that we have on this legislation.

I would just like to ask that you expand on a few points perhaps.

On this matter of licensure particularly that has just been mentioned, does this raise a question as to whether we ought to be considering the adequacy of the teaching faculty in some areas around the country?

Did you get into that at all?

Is there a shortage of teaching faculty in your opinion?

It seems to me that one of the requirements of periodic licensure is refresher courses and adult education, if you like, within the medical profession itself, and those already out in practice but who need to be kept up on new developments and skills.

Mr. SEIDMAN. I would have to say, Senator, that I am not particularly well informed on this, but I would raise one question in particular. That is, if we are going to move in the direction of putting more emphasis on primary care and family care, and if the present teaching group in medical schools is primarily concentrated in the more esoteric specialties, it may very well be that there will need to be some education and reeducation of the teaching personnel as well in

order to have the professors in the medical schools to train people for family care and primary care.

Senator TAFT. Perhaps some redirection of the medical schools themselves toward that approach.

I know in the case of Kent State in the Akron area, there was a big push there in the medical school, primarily directed toward providing family care.

Moving on, you mentioned the 50-percent figure in incoming classes.

Could you elaborate a little bit on the background of why you arrive at that decision as compared to 25 percent in the bill?

Do you have some statistics or additional background material you can provide us on how you arrived at that decision?

Mr. SEIDMAN. Well, we arrived at that decision because we think that the shortages in these areas are so acute, and the committee has had presented to it over and over again the statistics with respect to counties in the United States that have no physicians whatsoever, and the shortages, the very acute shortages in the innercity areas, that we think at least as soon as this program is fully underway for a considerable period of a year, and I do not know how much that should be, there should be a kind of crash program to begin to meet these needs. We do not think that 25 percent of the medical school graduates would do this.

Mr. SHOEMAKER. I have a few figures, not in any depth.

From testimony before this committee by others and people who are far more expert in this field than ourselves, it is indicated that overall rural shortage of physicians is running currently about 22,000 people, and perhaps another 10,000—

Senator TAFT. Could you speak up? We cannot hear you.

Mr. SHOEMAKER. The shortage of physicians in rural areas is in the neighborhood of 20,000. The shortage of physicians in inner cities in the neighborhood of about 10,000. And this is a tremendous gap and, obviously, if we are going to provide medical care for people in rural areas and intercities, there have to be more physicians in these areas as rapidly as feasible. This is really the first program that has really ever addressed itself seriously to this kind of problem.

We have been talking about these problems for the last 50 years, and up to this point have done absolutely nothing about it. It is getting worse.

As I understand, the shortage of physicians in rural areas is decreasing about 900 physicians per year. In 10 years from now, we will be 9,000 more physicians less than we need in rural areas.

Senator TAFT. With regard to this shortage question, how large an area should we be talking about?

Obviously, it seems to me that as to the family practitioner, the family care situation, that in the rural areas you have got one type of area you are talking about, you have got a transportation time problem that is involved as much as anything else.

But, in urban areas, I am not sure that the transportation situation necessarily means that you can identify an area as being a shortage area in the same way.



Now, do you do it by the time basis or time-travel situation or what?

Mr. SEIDMAN. Well, I agree with you, Senator, you cannot do it in exactly the same way. You have to identify it in terms of census tracts and that sort of thing, rather than metropolitan areas, because metropolitan area includes the suburbs which may not mean a shortage at all.

The other thing that I would emphasize is that it is especially in the shortage areas that you have the need for the primary care of physicians. You would expect that the more specialized type of care would be——

Senator TAFT. Larger area.

Mr. SEIDMAN. Larger area.

Senator TAFT. I am thinking of dentists. I talked to a number of dentists last week. They were pointing out, and I thought quite validly, what you are talking about is shortage area for family practitioner, and it may not be the same type of shortage area that should be talked about when you talk about dentists. People go less frequently to the dentist. There is not as much emergency need in most cases. You can plan ahead and travel somewhat further to a dentist than you would think satisfactory or even adequate so far as family care of physicians is concerned.

Mr. SEIDMAN. I have not seen the figures, but I have the feeling that in terms of dentists giving the primary care, if we can use that analogy, that there is probably a very considerable shortage in pretty much the same areas as the areas that do not have adequate medical care.

Senator TAFT. They may be in the same areas. But what I am saying is, you may in assigning somebody to a shortage area, insofar as dentists are concerned, you may be talking about a larger area, so far as providing the needed service.

Mr. SEIDMAN. Yes. You would probably be talking about a somewhat larger area because we do not have the same ratio as a whole of dentists to population, as we do have of physicians to population.

Senator TAFT. Do you think you should carry this same thing on to such things as surgery?

Mr. SEIDMAN. I am sorry?

Senator TAFT. Do you think the same principle should apply with regard to such skills as surgery?

Should you have a shortage area for surgeons as well?

Mr. SEIDMAN. I think in the first place we probably do not have a shortage of surgeons in many places——

Senator TAFT. Overall.

Mr. SEIDMAN [continuing]. Overall or even by area.

And second, the area for a surgeon is obviously larger than an area for primary care physicians.

Senator TAFT. You did not mention that implied on page 6 that you felt perhaps there was an excess of surgery involved here. But you did not make any mention of an specific surgery review procedure.

Do you have any comments you would like to make on that?

Mr. SEIDMAN. Well, in the first place, we have—there have been many articles in the professional press and so on pointing out that



there is an excess of surgery in the United States with various estimates. And, of course, the figure which has been given very often is that we have twice as much surgery in relation to the population in this country as in the United Kingdom so, therefore, we think that that is one of the reasons why we think it is important to move out of the specialties, including the surgical specialties, and into primary care where there is a shortage of physicians.

But, second, there has been various studies which have been made which show that there are particular types of procedures which seem to be unnecessary in many cases, and one which are often cited are hysterectomies and tonsillectomies and appendectomies.

Senator TAFT. Now, you oppose release from obligations rather strongly.

Are we not in danger of freezing people too much? In other words, when a student goes into medical school, he makes this choice, I suppose, to accept a scholarship or not, and become a part of 50 percent or 25 percent, or whatever it is or not, but it may well be that he is going to turn out from his teaching to find he is unsuited for the particular type of practice in his opinion and better suited for another type of practice.

Do you think some more flexibility perhaps in shifting from one type of service to another type of service ought to be permitted?

Mr. SEIDMAN. Perhaps some consideration should be given to this, but I think the overriding consideration should be meeting the most acute shortages we have.

It seems to me that only under the most unusual circumstances should this kind of shift be permitted. Otherwise, it seems to me the whole purpose of the effort might well be discarded.

Senator TAFT. I agree with you. We have to have some type of teeth in this legislation. I do not think there is any question about that.

I am disturbed by the fact that you may have a student go in, so far as his admission status is concerned, perhaps he is in the bottom third of the class, looked upon as being a capable person and one who would fit into family practice, and supposing his teaching suddenly becomes evident to the faculty and to him and everybody else that he is probably the top surgical student in the entire class and that he really ought to be a surgeon. He ought to go on and be a surgeon.

Now, we have under this bill the danger that there is a real penalty, economic penalty on his doing so. He may even be unable monetarily, totally unable to make that transfer even though he has a great potential later on.

I sort of hate to see us losing this skill of a person like that who may have promise of being tremendously capable by having the requirement that he cannot, under any circumstances, be released.

Mr. SEIDMAN. Well, in the first place, there is nothing to prevent him, after serving, from continuing in whatever specialty he wishes to continue in.

Senator TAFT. That is if he can get into the residency or the other position that he is going to have to pursue.

Mr. SEIDMAN. It would mean it might postpone that kind of residency by 2 years in order to meet these needs.

On the other hand, if there is some way—and, frankly, I do not know what it would be——

Senator TAFT. I do not know either. That is why I was asking the question.

Mr. SEIDMAN. If there is some way in which you could somehow take account of these very special problems and, at the same time, not destroy the objective, perhaps this should be considered.

Frankly, I do not know exactly how you would do it.

Senator TAFT. Just one other question.

You refer to especially favoring a provision in S. 992 that requires NHSC personnel to be assigned as part of the unit health personnel, including at least four doctors of medicine and of osteopathy.

How do you reconcile that with the need to assign doctors to family practice in remote areas?

Are you talking there only about the urban shortage area, or how do you reconcile this?

Mr. SHOEMAKER. We recognize delivery of health care in rural areas is a serious problem, and there are a lot of solutions that are being proposed.

We have clinics, practices in rural areas, for which actually they provide services for virtually everybody in the county. We have to take recognition of the means of transportation, and possibly we learn something from the Army and the use of helicopters.

I think you can have an outreach program in a sense, but I think in terms of quality of care, it could be provided by a group.

Senator TAFT. I am inclined to agree with you.

As you indicate, you are going to have to talk about a different geographical area and talk about a shortage area, if you are going to be able to go that way.

Mr. SHOEMAKER. There is also the physician extenders, too.

Senator TAFT. Thank you very much.

Thank you, Mr. Chairman.

Senator KENNEDY. Thank you very much, Senator Taft.

I want to thank you, Mr. Seidman, very much for your testimony. I think you have been very helpful in analyzing the various pieces of legislation and identifying what I consider, and I like to believe the other members do, too—the primary area of concern.

We are going to draw on your statement heavily as we develop our legislation on these particular issues.

Your statement and comments here have been very valuable to us, and I want to express the appreciation of the committee for your presentation and obvious thought that went into it.

We appreciate your appearance.

Mr. Seidman. Thank you very much, Mr. Chairman. We will be glad to cooperate with you in any way that we can.

Senator KENNEDY. Thank you very much.

The next witness we will hear from this morning is Linda Tarr-Whelan, International Union area director, New York State, American Federation of State, County, and Municipal Employees, AFSCME is one of the largest public employee unions; approximately 170,000 of its members are health workers.

We are delighted to have you, Ms. Tarr-Whelan.

You may proceed.



**STATEMENT OF LINDA TARR-WHELAN, INTERNATIONAL UNION  
AREA DIRECTOR, NEW YORK STATE, AMERICAN FEDERATION OF  
STATE, COUNTY, AND MUNICIPAL EMPLOYEES; ACCOMPANIED  
BY ROBERT E. MCGARRAH, JR., HEALTH SPECIALIST ATTORNEY,  
AND NANINE MEIKLEJOHN, LEGISLATIVE REPRESENTATIVE**

Ms. TARR-WHELAN. Thank you, Senator Kennedy.

We appreciate the opportunity of testifying before your committee on this important matter.

With me from AFSCME, on my left is Robert McGarrah, who is health specialist attorney for the International Union, and on my right is Nanine Meiklejohn, legislative representative for the union.

I have a prepared statement, Senator, which I would like to read.

Mr. Chairman and members of the committee, I am Linda Tarr-Whelan, New York State International Union area director, former director of the Department of Program Development and former health specialist for the American Federation of State, County, and Municipal Employees, AFL-CIO. I appear here today on behalf of the international union.

AFSCME is the Nation's largest public employee union with over 700,000 members in 33 States, 170,000 of whom work in mental health, retardation, and general hospitals as aides, nurses and psychiatric technicians.

At a time when Americans are spending more than \$118 billion annually for health care, it is a national disgrace that so many citizens find it impossible to locate a primary physician or, paradoxically, find themselves receiving unnecessary medical care from medical specialists. At the same time, despite a critical need for competent allied health care workers, we are literally throwing experienced employees out of work, in the midst of a national effort to close down public mental health and retardation facilities.

Although Congress has enacted legislation since 1963 to correct deficiencies in the supply and distribution of physicians, those deficiencies have grown worse.

States which had the highest physician population ratios in 1960—New York, Massachusetts, Connecticut, California, and Colorado—had increased their ratios 34 percent by 1970, while the five States with the lowest ratios—Alaska, South Dakota, Alabama, South Carolina, and Mississippi—increased by a meager 9 percent. Metropolitan areas today have 73 percent of the population, but they have 86 percent of the doctors. And despite the overconcentration of doctors in metropolitan areas, physicians are fleeing from inner cities to the suburbs as fast, if not faster, than the general "white flight" population.

What these trends mean is that large segments of our population—many of whom are AFSCME members—have more difficulty finding a doctor today than they did in 1960, before the Health Professions Educational Assistance Act, Public Law 88-129, was enacted.

Despite a tenfold increase in Federal assistance, we actually find ourselves today with less access to fewer primary care doctors than we had before the Federal health manpower program was started. The present structure of that assistance—the use of financial inducements



to encourage service in shortage areas—has proven itself to be inadequate as a means of dealing with the maldistribution problem.

But, then, financial inducements can hardly be expected to influence the wealthiest segment of the population in the same way, for example, that military bonuses have induced less fortunate citizens to enlist in the Armed Forces.

The paradox of many Americans without primary medical care, while others are victims of needless hospitalization and unnecessary surgery, is directly attributable to our national excess of specialists. Even the American College of Surgeons today agree that we have a surplus of at least 20,000 surgical specialists, and as Drs. John Bunker and Charles Lewis have noted, unnecessary surgery is directly attributable to the number of available surgeons.

This situation results in a waste of medical manpower that could be more effectively used in primary medical care, in wasted treatments and, worse, unnecessary morbidity and mortality, and in increased costs for the consumer.

The glut of surgeons, incidentally, was, in large part, responsible for AFSCME District Council 37's surgical consultation program. To reduce unnecessary surgery, the union's health and security fund provided members with an optional second specialist's opinion. The results were a startling drop of 30 percent in elective surgery.

A Federal program is needed to simultaneously encourage a reduction in the numbers of surgeons and an increase in the number of family and general practitioners. Without such a program, there is little likelihood that the national trend toward increased specialization will subside and that unnecessary surgery will decline.

Senator KENNEDY. Why should we support a Federal program?

Ms. TARR-WHELAN. First of all, we believe the medical profession itself has shown very little interest in changing the priorities. Right now, the supposition is that you make more money as a specialist and, therefore, there is a great financial inducement.

Senator KENNEDY. I agree with you. We have not seen medical schools do very much.

Should we have the CCME do this? Why not give them the responsibility to do it? Or do you think it ought to be done by HEW, drawing on information from CCME and other sources?

Ms. TARR-WHELAN. I believe that the health care is simply too important to be in the hands of specialists. And I think that the Department of Health, Education, and Welfare is the body which should call upon not only the recognized professional groups, which I feel is very important, but also upon very important consumer groups in this area so that we can resolve what is obviously a severe problem. And if one looks at the ages of people who are in primary practice now, for example, we can see without dramatic efforts—and I feel those efforts must be coordinated through the Federal Government—without those efforts we are going to have an increasing problem in providing primary care.

Senator KENNEDY. All right. Continue.

Ms. TARR-WHELAN. With regard to the proposed legislation, the present Comprehensive Health Manpower Training Act of 1971, Public Law 92-157, must be revised to deal with the problems we have outlined.

AFSCME opposed last year, and we continue to oppose, a capitation grant program such as those in S. 989 and H.R. 5546 which would require all students at any medical school receiving capitation grants to either serve in a shortage area or pay back the amount of the capitation grant to the school.

We continue to have serious doubts about the feasibility of obligating students to pay back the amount of grants received not by them but by their school.

We also continue to believe that such a program would discriminate against low-income students and health workers in the low wage rate categories who could not afford to buy their way out of service while others who are more fortunate could.

AFSCME prefers the approach now being discussed of reducing capitation grants and increasing scholarships as a way of dealing with the geographic maldistribution problem. Under this approach, the amount of the capitation grant would be reduced, the amount of a student scholarship would be substantially increased. A school would have to guarantee that a certain percentage of its students would take the scholarships. Scholarship students would have to serve 1 year for each year of scholarship assistance or pay back to the Federal Government double the amount of the scholarship.

A critical question for this committee, in our view, is what percent of the students should be required to accept scholarships and thereby incur the obligation to serve in an underserved area. The lower the percentage, the more the service burden is placed on the poor, disadvantaged, and the low-paid health workers returning to school who must get assistance to go to medical school.

The administration's proposal of 25 percent of incoming freshman class slots is too low in our view. At least 50 percent of the incoming class should bear the responsibility for service in underserved areas.

We are, however, especially concerned that double payback provisions for scholarship and loans not apply to students who drop out or are unable to complete medical school. Such a penalty would put an inordinately heavy burden on the student who changes career goals because of poor performance, economic factors, or other extenuating personal factors.

We are particularly concerned that there be active efforts to recruit more minority and people working in health field right now into medical schools, and we feel that the possibility that they might fail in medical school and thereby incur very massive financial debts of service or buy-back provisions might deter these groups from entering into the medical profession.

We feel that continuation of some capitation assistance is probably beneficial in any view because capitation grants provide an incentive to initiate or continue programs and policies that attempt to reduce health manpower problems.

For example, the problem of the overabundance of specialists can be addressed by requiring as a condition of receiving capitation assistance, that a certain percentage of each school's affiliated residencies be in primary care by a certain date. AFSCME supports a requirement that at least 50 percent of the residencies be in primary care by 1979.



Senator TAFT. Are you talking about residencies now or are you talking about medical students?

Ms. TARR-WHELAN. We actually used the figure in both cases, Senator.

With regard to residencies, a very great percentage, and I do not have the figure before me, of the residencies are in institutions connected with medical schools.

Senator TAFT. A lot of them are not though. That is the point I was going to make.

Ms. TARR-WHELAN. I do not know what that figure is, Senator. We would be happy to research it and provide it to the committee.

Senator TAFT. Residencies are generally assigned to a hospital unless the hospital happens to be affiliated with the medical school. And I do not think that it would apply.

Ms. TARR-WHELAN. Many of them, however, are in arrangements with medical schools.

For example, I am quite familiar with hospitals in the District of Columbia, and I believe that all of them with residency programs are associated with one of the medical schools here in the District of Columbia.

Senator TAFT. But you may be getting the cart before the horse, even though counsel advises me that 92 percent are affiliated in some way. "Some way" is a lot of language there, and "how" is something else again.

Medical schools may have little or no control over an institution that has residency, even though it may be affiliated.

Ms. TARR-WHELAN. That may be correct, Senator.

Senator TAFT. Putting medical schools at the mercy of the—in this sense, the mercy of institutions that has residency—

Ms. TARR-WHELAN. We do find, though, Senator, that these medical schools' connection, in many cases, is such if it were a condition of receiving Federal financial assistance, which many of the schools are searching for and need at this particular time, that that may be an inducement for the separate administrations to work together.

We feel that in many cases the specialty residences are very heavily stressed in these institutions. Many of them are in public institutions where we have members and are familiar with the situation, and totally to the exclusion of primary care.

The paragraph which follows, Senator Taft, comes from the American Medical Association's figures of their own, that even if we had such a requirement, that 50 percent of the residencies would have to be in primary care, it would take 10 years to change the percentage of physicians in primary care specialties from 35 percent to 38 percent, which would only be a 3 percent improvement, so this is an area in which we ought to consider some very strong language.

Capitation assistance is also an incentive for health professions schools to expand much needed physician extender and dental auxiliary programs. S. 989 provides such assistance by granting schools \$1,000 for each student enrolled in physician extender or expanded duty dental auxiliary programs. This provision must be retained.

For allied health workers, such as AFSCME's 170,000 members who work in public mental health, retardation and general hospitals,



health manpower legislation is particularly critical. These individuals have worked diligently to give the best care possible, despite often deplorable conditions in underfunded public institutions.

We are concerned about two critical aspects of allied health training; (1) assistance to currently employed allied health personnel in general hospitals, and (2) assistance to mental health and mental retardation employees who face the loss of their jobs due to deinstitutionalization.

1. General hospital personnel:

Low paid allied health employees in general hospitals provide a major share of the health care in medically underserved areas but they are given few incentives in any of the pending bills to work for degrees or professional positions.

While S. 989 provides for career ladder programs in section 789 A(a)(8), it must be strengthened. Career ladders should receive special emphasis by specific funding as a major form of training for allied health workers.

AFSCME is committed to the development of career ladder programs as a means of providing adequate health manpower by training people who have already proved their dedication through years of service to patients. Such programs can better achieve our manpower needs than rotating cadre of National Health Service Corps members who see their obligated service as a stepping stone to a lucrative fee for service practice.

The latter has a limited effect on long-range community manpower needs. During the past several years, the Career Development Department of this union has sponsored and organized career ladder programs in hospitals throughout the country.

In summary, AFSCME urges the Congress to enact a health manpower bill that will:

1. Equitably relieve the present geographic maldistribution of physicians by requiring at least 50 percent of each medical school class to practice in a physician shortage area;

2. Reduce the present excess of medical specialists by requiring all federally assisted medical schools to have at least 50 percent of their affiliated residencies in primary care;

3. Provide adequate funding for career ladders for allied health personnel;

4. Give priority retraining assistance to public institutional allied health workers for employment in community-based mental health and mental retardation facilities.

Thank you.

Senator KENNEDY. Fine. I think this is very helpful testimony.

I must say that of your final concluding comments, I think we are in very, very substantial agreement.

And I think you have properly emphasized and stressed the importance of allied health. We ought to make some adjustments in terms of the suggestions you have made; we will be interested in some specific recommendations. I am not sure we have previously included the programs that you have talked about here, so we ought to get some specific recommendations in terms of statutory language.

I think it is a very worthwhile suggestion and a valuable one, and we will be looking forward to hearing from you.

Ms. TARR-WHELAN. We will be happy to provide that.

Senator KENNEDY. I personally feel it is a constructive suggestion.

Senator TAFT. Mr. Chairman, let me ask just one basic question.

Senator KENNEDY. Senator Taft.

Senator TAFT. Both Mr. Seidman in his testimony, and your testimony, Ms. Tarr-Whelan, seem to imply that in order to get the additional funding necessary for the additional scholarship money, that we have to get it from capitation grants.

I take it that is because you are thinking about a fixed amount of dollars that can be allocated.

If you take that away and say we are not setting fixed amounts here, do you still favor a reduction in capitation grants?

I am quite concerned with the approach that these two are necessarily interrelated, and they may have to be ultimately, in our budgetary thinking, but just because one goes up—and is a good thing to do—does not necessarily mean the other is bad. I am very concerned that if we reduced capitation grants, we may have either one or two effects.

One effect, which will be just a standoff, is tuition will have to go up because medical schools are relying in their budgets on capitation grants, and that, in turn, is not going to achieve the purpose of having the scholarship program bring about the desired results.

On the other hand, if it does not do that, you might have a little of both, and the other effect would seem to me to hurt the caliber of teaching you are able to get in medical schools.

Ms. TARR-WHELAN. I understand the Senator's concern, I think a part of the reason for decreasing one to increase the other was, from the standpoint of considering that there was a dollar amount which had to be allocated.

One of the major reasons for an increase in the scholarship and a decrease in the capitation is based on the fact that we feel that the capitation grant has not been a successful method of providing physicians in this country in those areas where people need care, which, as far as our estimation is concerned, is the provision of the primary care or the family care.

So that, in addition to the fact of just consideration of the dollar amount, some of our consideration was given that if there are dollars to be allocated, we feel that perhaps the scholarship mechanism tied to service in underserved areas would end up serving the ultimate health goal better than increased capitation.

Senator TAFT. Thank you.

Senator KENNEDY. Some of us do not want to break the budget, Senator.

Senator TAFT. You have always been a fiscal conservative.

[Laughter.]

Career ladder programs are, by far, the least expensive, yet the most productive way, to train allied health personnel. If the authorization level in S. 989 were solely for career ladder programs, it would be no more than adequate.

AFSCME believes that the authorization level should, in fact, be increased to provide sufficient numbers of trained allied health per-



sonnel as well as funds for present allied health personnel to be trained as health professionals.

## 2. Mental health and retardation personnel :

Allied health workers in institutions for the mentally ill and the retarded face different, perhaps more crucial, problems posed by our national deinstitutionalization policy.

In public mental hospitals, the patient census has declined from 558,900 in 1955 to 215,573 in 1974—a drop of 343,327 or 61 percent. Staff declined dramatically during this period.

Last year alone, there was a loss of nearly 10,000 full-time mental health staff members. New York and California have already drastically reduced staff and closed State mental hospitals, and Massachusetts, Pennsylvania, Illinois, Michigan, and Minnesota, among others, have plans to do the same.

Indeed, congressional action through medicaid, medicare, the Social Services Amendments of 1974 (title XX), the Developmental Disabilities Act of 1975, and the Health Services and Nurse Training Act of 1975 has placed a high priority on reducing and terminating State mental hospital treatment whenever possible.

As for the mentally retarded, HEW has recently announced that it has begun a high-priority plan to reduce the population of public institutions by one-third by 1980. The objective is community-based treatment and habilitation.

AFSCME supports responsible movement toward this goal. Like deinstitutionalization of the mentally ill, however, a major problem is how to retain valuable health care workers. The answer is simple. Provide retraining for community-based care under the Allied Health Provisions of the Health Manpower legislation.

Studies have already demonstrated the advantages of retraining experienced allied health workers for community work. Mental institution employees, for example, show more willingness to work with the severely impaired; know their former hospital patients well; are willing to rotate shifts, including evening and weekend work; are accustomed to patient behaviors; and are already trained to focus on improving patients' functioning.

The cost of retraining is minimal, particularly when compared to the benefits to the health care system.

For example, under contract with the Department of Labor, AFSCME has retrained mental health employees at an average of \$1,000 per person for a 15-week course. We have also had experience with similar retraining and career ladder programs in Massachusetts, Maryland, Ohio, Texas, Wisconsin and Washington.

Congress recognized the need to attempt to relocate allied health workers adversely affected by deinstitutionalization when it enacted the Developmental Disabilities Act of 1975 and the Health Services and Nurse Training Act of 1975. These two acts require the Secretaries of Labor and HEW to attempt to locate alternative employment for former institutional employees. However, Federal funds for retraining these employees to facilitate their transfer to other jobs are virtually nonexistent.

Accordingly, we propose that title VII, part G, of the Public Health Service Act, pertaining to training in the allied health professions, be



amended to provide special retraining assistance to allied health personnel who work in public institutions for the mentally ill and the mentally retarded. Retraining assistance should give priority attention to the needs of public institutional employees, since they bear the brunt of the deinstitutionalization effort.

Allied health training has not received adequate attention by national policymakers. Many sections of the present program have never been funded. Now, the administration is calling for the elimination of the program, and H.R. 5546 drastically reduces it.

We believe the needs in allied health which we have outlined argue for an expanded, not a reduced role in allied health. We urge the committee to enact authorization levels at least equivalent to those available in fiscal 1974.

Senator KENNEDY. Let me say concerning the budget that we have all, including my good friend and colleague, spent many hours trying to get a health manpower bill. We have been over and around and through the war on this. The Budget Committee has given us last year plus 10 percent, and that seems to be what they are going to provide for us. So what we are trying to do is set up ways by which medical schools will know the amount of support that they are going to get and be able to plan on it, to understand with this commitment that these resources are going to be available to them.

Where the fund will come from may be somewhat different, obviously, in terms of increased tuition, rather than capitation. But this is appropriate, although I am sure this is going to be a matter which is going to be heavily debated, in this committee and on the floor. Physicians' revenues have gone up a good deal over this period. I would guess their salaries have probably gone up more than tuitions have gone up over the period of time.

What we are trying to do is both be practical. To consider some of the realities.

I am hopeful we can at least work in this area.

Obviously, the two extremes are: one, providing, as Dr. Roy proposed, a total program of scholarships with a dramatic reduction in capitation. This program costs about \$700 million, which is likely not to be appropriated. And there was the other proposal which is the mandatory service proposal. This could be done less expensively, but we are not going to get it. So what we are trying to get is something that makes sense in between here.

I do feel myself that it makes a good deal of sense. We are going to have to take these issues up.

We are glad to have your suggestions and strong support for this type of approach.

We will work with you in the areas of the allied health manpower. I think those are good suggestions. Obviously we have a great interest in the State institutions and Federal institutions, in the kind of health care that is provided. And in the manpower needs in the area of mental retardation, of course, which I have some special interest in.

I want to thank you very much.

Ms. TARR-WHELAN. Thank you very much.

[The prepared statement of Ms. Tarr-Whelan follows:]

STATEMENT OF LINDA TARR-WHELAN  
NEW YORK STATE INTERNATIONAL UNION AREA DIRECTOR  
OF THE  
AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES  
BEFORE THE SENATE SUBCOMMITTEE ON HEALTH OF THE SENATE LABOR AND PUBLIC WELFARE COMMITTEE  
ON HEALTH MANPOWER LEGISLATION  
OCTOBER 29, 1975

Mr. Chairman, members of the Committee, I am Linda Tarr-Whelan, New York State International Union Area Director, former Director of the Department of Program Development and former Health Specialist for the American Federation of State, County and Municipal Employees, AFL-CIO. I appear here today on behalf of the International Union. AFSCME is the nation's largest public employee union with over 700,000 members in 33 states, 170,000 of whom work in mental health, retardation and general hospitals as aides, nurses and psychiatric technicians.

DOCTOR SHORTAGES AND SPECIALISTS EXCESS

At a time when Americans are spending more than \$118 billion annually for health care, it is a national disgrace that so many citizens find it impossible to locate a primary physician or, paradoxically, find themselves receiving unnecessary medical care from medical specialists. At the same time, despite a critical need for competent allied health care workers, we are literally throwing experienced employees out of work, in the midst of a national effort to close down public mental health and retardation facilities.



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Although Congress has enacted legislation since 1963 to correct deficiencies in the supply and distribution of physicians, those deficiencies have grown worse. States which had the highest physician-population ratios in 1960 (New York, Massachusetts, Connecticut, California, and Colorado) had increased their ratios 34% by 1970, while the five states with the lowest ratios (Alaska, South Dakota, Alabama, South Carolina, and Mississippi) increased by a meager 9%<sup>1</sup>. Metropolitan areas today have 73% of the population, but they have 86% of the doctors<sup>2</sup>. And despite the over-concentration of doctors in metropolitan areas, physicians are fleeing from inner cities to the suburbs as fast (if not faster) than the general "white flight" population.

What these trends mean is that large segments of our population - many of whom are AFSCME members - have more difficulty finding a doctor today than they did in 1960, before the Health Professions Educational Assistance Act (P.L. 88-129) was enacted. Despite a tenfold increase in federal assistance, we actually find ourselves today with less access to fewer primary care doctors than we had before the federal health manpower program was started. The present structure of that assistance - the use of financial inducements to encourage service in shortage areas - has proven itself to be inadequate as a means of dealing with the maldistribution problem. But then financial inducements can hardly be expected to influence the wealthiest segment of the population in the same way, for example, that military bonuses have induced less fortunate citizens to enlist in the armed forces.

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The paradox of many Americans without primary medical care, while others are victims of needless hospitalization and unnecessary surgery, is directly attributable to our national excess of specialists. Even the American College of Surgeons today agree, that we have a surplus of at least 20,000 surgical specialists<sup>3</sup>, and as Drs. John Bunker and Charles Lewis have noted, unnecessary surgery is directly attributable to the number of available surgeons.

This situation results in a waste of medical manpower that could be more effectively used in primary medical care, in wasted treatments and, worse, unnecessary morbidity and mortality, and in increased costs for the consumer.

The glut of surgeons, incidently, was in large part responsible for AFSCME District Council 37's Surgical Consultation Program. To reduce unnecessary surgery they Union's Health and Security Fund provided members with an optional second specialist's opinion. The results were a startling drop of 30% in elective surgery.<sup>4</sup>

A federal program is needed to simultaneously encourage a reduction in the numbers of surgeons and an increase the number of family and general practitioners. Without such a program there is little likelihood that the national trend toward increased specialization will subside and that unnecessary surgery will decline. In all probability, we may well reach 1980 with less than 10% of our physicians in general practice.

## PROPOSED LEGISLATION

The present Comprehensive Health Manpower Training Act of 1971 (P.L. 92-157) must be revised to deal with the problems we have outlined.

AFSCME opposed last year and we continue to oppose a capitation grant program such as those in S. 989, and H.R. 5546 which would require all students at any medical school receiving capitation grants to either serve in a shortage area or pay back the amount of the capitation grant to the school. We continue to have serious doubts about the feasibility of obligating students to pay back the amount of grants received not by them but by their school. We also continue to believe that such a program would discriminate against low income students and health workers in the low wage rate categories who could not afford to buy their way out of service while others who are more fortunate could.

AFSCME prefers the approach now being discussed of reducing capitation grants and increasing scholarships as a way of dealing with the geographic maldistribution problem. Under this approach the amount of the capitation grant would be reduced, the amount of a student scholarship would be substantially increased. A school would have to guarantee that a certain percentage of its students would take the scholarships. Scholarship students would have to serve one year for each year of scholarship assistance or pay back to the federal government double the amount of the scholarship.



A critical question for this committee, in our view, is what percent of the students should be required to accept scholarships and thereby incur the obligation to serve in an underserved area. The lower the percentage, the more the service burden is placed on the poor, disadvantaged, and the low-paid health workers returning to school who must get assistance to go to medical school. The Administration's proposal of 25% of incoming freshman class slots is too low in our view. At least 50% of the incoming class should bear the responsibility for service in underserved areas.

We are especially concerned that double pay-back provisions for scholarship and loans not apply to students who drop out or are unable to complete medical school. Such a penalty would put an inordinately heavy burden on the student who changes career goals because of poor performance, economic factors, or other extenuating personal factors.

Continuation of some capitation assistance is probably beneficial in any view because capitation grants provide an incentive to initiate or continue programs and policies that attempt to reduce health manpower problems. For example, the problem of the overabundance of specialists can be addressed by requiring as a condition of receiving capitation assistance, that a certain percentage of each school's affiliated residencies be in primary care by a certain date. AFSCME supports a requirement that at least 50 percent of the residencies be in primary care by 1979. Even the

American Medical Association's Division of Medical Education has estimated that such a requirement would take 10 years to produce 50,000 more primary care physicians, thereby increasing the percentage total of physicians in primary care specialties only to 38.6% from 35.1% . Capitation assistance is also an incentive for health professions schools to expand much needed physician-extender and dental auxiliary programs. S. 989 provides such assistance by granting schools \$1,000 for each student enrolled in physician extender or expanded duty dental auxiliary programs. This provision must be retained.

ALLIED HEALTH MANPOWER

For allied health workers such as AFSCME's 170,000 members who work in public mental health, retardation and general hospitals, health manpower legislation is particularly critical. These individuals have worked diligently to give the best care possible, despite often deplorable conditions in underfunded public institutions.

We are concerned about two critical aspects of allied health training: (1) assistance to currently employed allied health personnel in general hospitals, and (2) assistance to mental health and mental retardation employees who face the loss of their jobs due to deinstitutionalization.

1. General Hospital Personnel

Low-paid allied health employees in general hospitals provide a major share of the health care in medically underserved areas but they are given few incentives in any of the pending bills to work for degrees or professional positions. While S. 989 provides for career ladder programs in Sec. 789 A (a)(8), it must be strengthened. Career ladders should receive special emphasis by specific funding as a major form of training for allied health workers.

AFSCME is committed to the development of career ladder programs as a means of providing adequate health manpower by training people who have already proved their dedication through years of service to patients. Such programs can better achieve our manpower needs than a rotating cadre of National Health Service Corps members who see their obligated service



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as a stepping stone to a lucrative fee for service practice. The latter has a limited effect on long-range community manpower needs. During the past several years the Career Development Department of this union has sponsored and organized career ladder programs in hospitals throughout the country.

Career ladder programs are by far the least expensive, yet the most productive way to train allied health personnel. If the authorization level in S. 989 were solely for career ladder programs, it would be no more than adequate. AFSCME believes that the authorization level should, in fact, be increased to provide sufficient numbers of trained allied health personnel as well as funds for present allied health personnel to be trained as health professionals.

## 2. Mental Health and Retardation Personnel

Allied health workers in institutions for the mentally ill and the retarded face different, perhaps more crucial, problems posed by our national deinstitutionalization policy.

In public mental hospitals, the patient census has declined from 558,900 in 1955 to 215,573 in 1974 -- a drop of 343,327 or 61%.<sup>6</sup> Staff declined dramatically during this period. Last year alone there was a loss of nearly 10,000 full-time mental health staff members.<sup>7</sup> New York and California have already drastically reduced staff and closed state mental

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hospitals, and Massachusetts, Pennsylvania, Illinois, Michigan, and Minnesota, among others, have plans to do the same. Indeed, Congressional action through Medicaid, Medicare, the Social Services Amendments of 1974 (Title XX), the Developmental Disabilities Act of 1975, and the Health Services and Nurse Training Act of 1975 has placed a high priority on reducing and terminating state mental hospital treatment whenever possible.

As for the mentally retarded, HEW has recently announced that it has begun a high-priority plan to reduce the population of public institutions by one-third by 1980.<sup>8</sup> The objective is community-based treatment and habilitation. AFSCME supports responsible movement toward this goal. Like deinstitutionalization of the mentally ill, however, a major problem is how to retain valuable health care workers. The answer is simple: provide retraining for community-based care under the Allied Health provisions of the Health Manpower legislation.

Studies have already demonstrated the advantages of retraining experienced allied health workers for community work.<sup>9</sup> Mental institution employees, for example, show more willingness to work with the severely impaired; know their former hospital patients well; are willing to rotate shifts including evening and weekend work; are accustomed to patient behaviors; and are already trained to focus on improving patients' functioning.<sup>10</sup>

The cost of retraining is minimal particularly when compared to the benefits to the health care system. Under contract with the Department of Labor, AFSCME has retrained mental health employees at an average of \$1,000 per person for a 15 week course. We have also had experience with similar retraining and career ladder programs in Massachusetts, Maryland, Ohio, Texas, Wisconsin, and Washington.

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Congress recognized the need to attempt to relocate allied health workers adversely affected by deinstitutionalization when it enacted the Developmental Disabilities Act of 1975 and the Health Services and Nurse Training Act of 1975. These two Acts require the Secretaries of Labor and HEW to attempt to locate alternative employment for former institutional employees. However federal funds for retraining these employees to facilitate their transfer to other jobs are virtually nonexistent.

Accordingly, we propose that Title VII, Part G of the Public Health Service Act, pertaining to Training in the Allied Health Professions, be amended to provide special retraining assistance to allied health personnel who work in public institutions for the mentally ill and the mentally retarded. Retraining assistance should give priority attention to the needs of public institutional employees, since they bear the brunt of the deinstitutionalization effort.

Allied health training has not received adequate attention by national policy makers. Many sections of the present program have never been funded. Now the Administration is calling for the elimination of the program, and H.R. 5546 drastically reduces it. We believe the needs in allied health which we have outlined argue for an expanded, not a reduced role in allied health. We urge the committee to enact authorization levels at least equivalent to those available in Fiscal 1974.



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In summary, AFSCME urges the Congress to enact a health manpower bill that will:

1. Equitably relieve the present geographic maldistribution of physicians by requiring at least 50% of each medical school class to practice in a physician shortage area.
2. Reduce the present excess of medical specialists by requiring all federally assisted medical schools to have at least 50% of their affiliated residencies in primary care.
3. Provide adequate funding for career ladders for allied health personnel.
4. Give priority retraining assistance to public institutional allied health workers for employment in community-based mental health and mental retardation facilities.

NOTES

1. Pierre DeVise, Health Planning in Illinois, "Illinois Regional Medical Program", fall 1971; vol. II, No. 3, p.5.
2. Pierre DeVise, The Changing Supply of Physicians in California, Illinois, New York, and Ohio. Working Paper I. 21. Chicago Regional Hospital Study, April, 1974 pp. 4-5.
3. Medical World News, July 28, 1975, P. 23.
4. New England Journal of Medicine 291: 1331, December 19, 1974.
5. Senate Report No. 93-1133, Health Professions Educational Assistance Act of 1974, p. 72.
6. Medical World News, April 12, 1974, p. 26.
7. Press Release, National Institute of Mental Health, June 6, 1975.
8. Speech by Stanley B. Thomas, Jr. Assistant Secretary for Human Development, Department of Health, Education and Welfare, to the National Association for Retarded Citizens, October 21, 1975.
9. American Journal of Psychiatry 132: 617, June 1975; L. Stein, et al, "Retraining a Mental Hospital Staff to Work in the Community" (unpublished paper, 1974).
10. L. Stein, Ibid., pp. 2-3.

Senator KENNEDY. Our next witness is Nelson H. Cruikshank, president of the National Council of Senior Citizens.

The National Council of Senior Citizens has a membership of more than 3 million older persons. It was instrumental in the fight to enact medicare in the early 1960's and continues to be seriously concerned about the health care available to the elderly.

You are a long-time friend of this committee as well as a long-time friend personally.

We have your statement. It will be included in the record.

**STATEMENT OF NELSON H. CRUIKSHANK, PRESIDENT, NATIONAL COUNCIL OF SENIOR CITIZENS, WASHINGTON, D.C.**

Mr. CRUIKSHANK. Thank you, Mr. Chairman and Senator Taft.

I appreciate the opportunity of being here this morning, and I appreciate your willingness to enter my statement in the record.

Senator KENNEDY. It will be included in the record at the conclusion of your testimony.

Mr. CRUIKSHANK. May I ask that one change be made down in the sixth line from the bottom on page 1, insert the word "and" after "Act of 1975."

We are not here as experts on health manpower at this time. Our expertise is in the needs of the older people of this country, and the membership of the National Council of Senior Citizens, I think, is typical. It is generally thought most older people on retirement move to the sun areas of the country, southern Florida, California, and to the sun areas of the Southwest, but actually it is a relatively small proportion of these people who move into those areas.

The great number of older people are in what you might call the residual areas of the country. They live where they have always lived, and a great many of them live in innercity areas, while a great many of them live in rural areas.

It is surprising sometimes that people note the areas that have the highest proportion of older people in the country are not only the resort or retirement areas that I have mentioned, but also some of the rural areas like Iowa and western Kansas. Some of those areas are also the areas which are underserved in terms of health manpower distribution.

It is for those reasons that we are very much interested in the proposals before your committee.

It is very encouraging to us to note that Dr. Theodore Cooper, Assistant Secretary for Health, in his recent testimony before this committee seemed to be moving in the direction of some of the bills that have been introduced, and also that there is a disposition on the part of the members of the committee itself to move toward a middle ground.

We are very encouraged by this movement, and it seems to offer the hope for a meaningful health manpower bill be enacted in this session of Congress, a prospect which we find encouraging.

Now, concerning the supply of manpower, we note that the administration's testimony expresses concern about an oversupply of physicians by 1985. This oversupply figure is based on a modest estimate of the reduction in the supply of foreign medical graduates, which the administration believes the Government should not restrict.



We do not think Government restriction of immigration is either advisable or necessary, but we do think that when an adequate supply of graduates of U.S. medical schools is available, hospitals will give the latter graduates preference in filling residency slots.

We therefore support Senator Kennedy's proposal that a condition for medical and osteopathic schools to continue participation in the capitation program be that they increase their enrollment.

We have some question about the suggestion that the capitation rate be reduced for schools of medicine. We recognize, however, the need to keep this total program within certain financial bounds. If, therefore, a choice must be made between capitation vis-a-vis the proposed scholarship program, we would support higher funding of the latter.

We particularly endorse the voluntary nature of the scholarship program.

We had some qualms about this. We recognized this may mean that the well-to-do student coming from a well-to-do family may have the freedom to graduate and go into more affluent areas, and that the poor student coming from a poor family may have to take this other choice.

However, in a choice of values here, we believe that this freedom of selection, this freedom of choice, is important, particularly in medical school field. And we have come to the conclusion that it would probably be better for the patients, as well as for the physicians, in the whole medical service system if this freedom of choice were preserved.

We have some question as to how well the underserved areas would be served if students were under this kind of compulsion. In this area, therefore, we are pleased to note that this scholarship program has recognized the importance of this freedom of choice.

The administration recommended, as a condition of capitation, that medical and dental schools set aside an annually increasing percentage of first year places for students who agree to practice in an underserved area, starting at 15 percent in fiscal year 1977 and increasing to 25 percent in fiscal year 1979. It has been suggested that this be 50 percent in the first year of the new program, fiscal year 1977. We have some concern about 50 percent as an initial requirement, although we agree with it as a goal. We suggest consideration of an incremental approach.

We support the special scholarship program and preadmission assistance for the disadvantaged, as recommended by both the administration and Senator Kennedy.

Another capitation condition recommended by the administration and which we support, would require the medical and osteopathic schools to establish an identifiable teaching unit in family medicine or primary care. Related to this condition would be a requirement that schools have a high percentage of their filled residencies in primary care (administration proposal). S. 989 calls for the Secretary of HEW to have authority to place an overall ceiling on the number of approved residency training positions in the country, and to assure a proper balance between primary care and specialty training.

We are inclined toward the administration's suggestion, as it thus remains in the voluntary area. We also support the proposal for grants to establish or expand graduate training in the primary care specialties, as well as in family medicine training.

We are aware of the problems that the elderly, as well as others, have with the services of foreign medical graduates. Primarily, these problems may be related to the quality of training which these physicians have received in other countries. A large part of the problem also results from the difficulties that the foreign physician may have in communicating with the patient and with other physicians in the hospital setting.

We support, therefore several proposals; (1), that FMG's practicing in this country be reasonably fluent in English; (2), that grants be made to hospitals to provide FMG residents with intensive clinical instruction and intensive English language instruction when it is needed; (3), a requirement that FMG's pass parts I and II of the National Boards before assuming patient care responsibilities.

In summary, we are heartened by the likelihood of passage of a health manpower bill which would be supported by the Congress and the administration, and which would address many of the current problems in supply, distribution, and quality. We recommend that the bill carry a 5-year, rather than a 3-year authorization.

Thank you, Mr. Chairman and members of the committee.

Senator KENNEDY. Fine; thank you very much, Mr. Cruikshank, for those suggestions. I think they are very helpful.

I think the point which you made which is very, very essential is that this legislation is even more necessary, in terms of the elderly people, than the general population because of the immobility of many elderly people. They have a more difficult time traveling long distances in rural areas as well as in the inner cities. Therefore, the availability of health manpower and trained manpower and resources in all of our communities and neighborhoods is even more essential, for the elderly people.

Whatever justification there is, and I think that there is plenty in terms of the population as a whole, it is even more dramatic in terms of our elderly people. This is a point that ought to be underscored.

Mr. CRUIKSHANK. That is definitely true. There are some things being done with the problem of transportation, as you know, Senator. You had a part in it under the Older Americans Act which is making some transportation available for elderly people.

But the improvements in transportation do not do any good if there are no doctors available. And there are wide areas, which you have pointed out yourself, where none are.

Senator KENNEDY. In the area of need for elderly people—often they need specialized care—but many of the needs they have can be met by primary care physicians.

Mr. CRUIKSHANK. That is definitely true.

Senator KENNEDY. I want to thank you very much. This has been very helpful comment and testimony. You are always very helpful. It is a pleasure to see you again and your support for progressive legislation which can do something, hopefully, to meet our health manpower needs is appreciated.

We could talk a lot about other health care issues, as well but we will not today. It is always good to have you here, Mr. Cruikshank.

Mr. CRUIKSHANK. Thank you, Senator. It is a privilege to be here. [The prepared statement of Mr. Cruikshank follows:]



Testimony on Health Manpower Legislation  
by Nelson H. Cruikshank, President  
National Council of Senior Citizens  
1511 K Street, N.W., Washington, D.C.

submitted to the  
Subcommittee on Health  
Committee on Labor and Public Welfare  
United States Senate  
Room 4232, Dirksen Office Building  
October 29, 1975

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### Introduction

My name is Nelson H. Cruikshank, President of the National Council of Senior Citizens. The National Council consists of over 3,500 clubs, with a membership of more than three million older persons. It was instrumental in the fight to enact Medicare in the early sixties, continues to be seriously concerned about the health care available to the elderly, and has remained an effective, nonpartisan forum for political and social action for the elderly.

We are here today because older persons constitute one of the major population groups adversely affected by the geographic maldistribution of medical and dental manpower, and the distortions in the national supply and distribution of primary and specialty manpower.

The Medicare experience has clearly demonstrated that a financing mechanism is not enough. We urge, therefore, that before a National Health Security Program, which we strongly support, can become fully operative, a program correcting present shortages, distribution, and standards for health manpower be enacted. We believe that such a program can result from consideration of S. 989, the Health Professions Educational Assistance Act of 1975, the administration's proposals as embodied in Assistant Secretary Theodore Cooper's recent testimony before this Committee. These proposals indicate that the interested parties are getting more nearly together. This is most encouraging. We should particularly like to comment on some aspects of these several proposals.



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Manpower Supply

The administration's testimony expresses concern about an oversupply of physicians by 1985. This oversupply figure is based on a modest estimate of the reduction in the supply of foreign medical graduates, which the administration believes the government should not restrict. We do not think government restriction of immigration is either advisable or necessary, but we do think that when an adequate supply of graduates of U.S. medical schools is available, hospitals will give the latter graduates preference in filling residency slots. We therefore support Senator Kennedy's proposal that a condition for Medical and Osteopathic schools to continue participation in the capitation program be that enrollment is increased.

We have some question about the suggestion that the capitation rate be reduced for schools of medicine. We recognize, however, the need to keep this total program within certain financial bounds. If, therefore, a choice must be made between capitation vis-a-vis the proposed scholarship program, we would support higher funding of the latter.

Scholarship Program

We particularly endorse the voluntary nature of the scholarship program. We did not approve the provision of S. 989 which would have required all Medical, Osteopathic and Dental graduates to be subject to assigned service. The voluntary scholarship program and the loan program, however, together provide a choice for the student.

The administration recommended, as a condition of capitation, that medical and dental schools set aside an annually increasing percentage of first year places for students who agree to practice in an underserved area, starting at 15 percent in FY 77 and increasing to 25 percent in FY 79. It has been suggested that this be 50 percent in the first year of the new program, FY 77. We have some concern about 50 percent as an initial requirement, although

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we agree with it as a goal. We suggest consideration of an incremental approach.

We support the special scholarship program and pre-admission assistance for the disadvantaged, as recommended by both the administration and Senator Kennedy.

#### Specialty Maldistribution

Another capitation condition recommended by the administration and which we support, would require the Medical and Osteopathic schools to establish an identifiable teaching unit in family medicine or primary care. Related to this would be a requirement that schools have a high percentage of their filled residencies in primary care (administration proposal). S. 989 calls for the Secretary of HEW to have authority to place an overall ceiling on the number of approved residency training positions in the country, and to assure a proper balance between primary care and specialty training. We are inclined toward the administration's suggestion, as it thus remains in the voluntary area. We also support the proposal for grants to establish or expand graduate training in the primary care specialties, as well as in family medicine training.

#### Foreign Medical Graduates

We have been aware of the problems the elderly, as well as others, have with the services of foreign medical graduates. Primarily, this may be the quality of training these physicians received in other countries. A large part of the problem also results from the difficulties the foreign physician may have in communicating with the patient and with other physicians in the hospital setting. We support, therefore, several proposals: 1) that FMGs practicing in this country be reasonably fluent in English; 2) that grants be made to hospitals to provide FMG residents with intensive clinical instruction and intensive English language instruction when needed; 3) a requirement that FMGs pass Parts I and II of the National Boards before assuming patient care responsibilities.

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Conclusion

In summary, we are heartened by the likelihood of passage of a health manpower bill which would be supported by the Congress and the administration, and which would address many of the current problems in supply, distribution, and quality. We recommend that the bill carry a five-year, rather than a three-year, authorization.

*Thank you, Mr. Chairman & members of  
The Committee.*



Senator KENNEDY. Our last group of witnesses this morning is a panel of representatives from Protestant Churches. The panel includes A. James Armstrong, the Bishop of Dakotas Areas, United Methodist Church, Aberdeen, S. Dak.; Beatrice Burgess, Church and Community Worker, Monroe County Cooperative Parish, W.V.; Reverend Guy Delaney, Pastor, Second Presbyterian Church, Little Rock, Ark.; Paul Kortepeter, Elder, Second Presbyterian Church, Indianapolis, Ind.; and Malcolm Peterson, M. D., Friends Committee on National Legislation, Washington, D.C.

I want to thank you, ladies and gentlemen, for your appearance here.

Personally, in the 12 or 13 years that I have been in the U.S. Senate, I have seen that we have been able to get really important legislation when we have the support of church groups. I think this has been true, certainly in the areas that I have been most interested in: Civil rights, ending the war, the environment, and many other important issues.

We have still got a long way to go in mobilizing the kind of a coalition necessary to meet our great human needs in our society. But it is really, very impressive. I think all of you deserve a good deal of credit for doing it. As we all know, you cannot stick your head out without someone taking you on on these issues. I think having your support is terribly essential.

I quite frankly agree with the members of the various churches that, in order to live fully, that one does have to be healthy. To be able to have the basics, the fundamentals—education, housing, adequate food—I think the dignity of man requires it.

I am glad that you are willing to appear here before us this morning to speak with us on these matters.

Dr. Peterson, Senator Beall had wanted to be here and introduce you personally. He is unable to be here. He is in a budget committee. He did want to extend a warm welcome to you.

Thank you for coming.

We will start off with Dr. Peterson.

**STATEMENTS OF MALCOLM PETERSON, M.D., PH. D., DEAN, SCHOOL OF HEALTH, JOHNS HOPKINS UNIVERSITY, ON BEHALF OF THE FRIENDS COMMITTEE ON NATIONAL LEGISLATION, WASHINGTON, D.C.; GROVER C. BAGBY, ASSOCIATE GENERAL SECRETARY, BOARD OF CHURCH AND SOCIETY OF THE UNITED METHODIST CHURCH, ON BEHALF OF A. JAMES ARMSTRONG, BISHOP OF THE DAKOTAS AREA, UNITED METHODIST CHURCH, ABERDEEN, S. DAK.; BEATRICE BURGESS, CHURCH AND COMMUNITY WORKER, MONROE COUNTY COOPERATIVE PARISH, WEST VIRGINIA; GUY DELANEY, PASTOR, FIRST PRESBYTERIAN CHURCH, LITTLE ROCK, ARK.; AND PAUL KORTEPETER, ELDER, SECOND PRESBYTERIAN CHURCH, INDIANAPOLIS, IND.; A PANEL OF REPRESENTATIVES FROM PROTESTANT CHURCHES**

Dr. PETERSON. Mr. Chairman, my name is Dr. Malcolm Peterson. I am dean of the School of Health Services of the Johns Hopkins University, but today I am pleased to be appearing here as spokesman for the Friends Committee on National Legislation.

The Friends Committee on National Legislation exists to serve the interests of members of the Religious Society of Friends, commonly called Quakers, in national legislative and administrative activities having to do with both international and domestic policy. This committee is widely representative of Friends' groups around the Nation, but does not purport to speak for all Friends, who cherish their rights to individual opinions.

My comments on pending legislation regarding the fiscal support of educating providers of health care for the future reflect the concerns of a vast number of American citizens who, through their religious affiliations, have expressed their agreement on the principles set forth by FCNL in its statement of "Principles of Health Care in the United States."

In expressing our dissatisfaction with the proposed legislation I do not wish to lead the members of this committee to think we oppose the goals of the legislation, nor do we fail to recognize that there is an imperative for immediate action by Congress if current authorization for Federal fiscal support of health manpower education is not to be abruptly terminated with disastrous consequences.

Indeed, the Friends Committee on National Legislation believes that the manpower needs of the Nation's health care system can be met only by Federal support of the education of this national resource—the practitioners who provide health services—and we believe that the special needs created by maldistribution of practitioners and imbalances of the numbers of specialists require that Congress impose constraints when providing this support.

Thus, we are testifying today in support of the Senate's legislation on health manpower with the qualifications I would now like to discuss.

These legislative proposals in support of more and better primary care practitioners incorporate some long needed and essential features affecting the supply of health manpower. We concur that only those practitioners who have demonstrated a single standard of competency should be certified to function in the health care system, and therefore we support the provision that a single standardized examination—plus English fluency test—should be required of all foreign medical graduates educated in U.S. schools.

Further, we agree that to achieve consistency, a universal standard of quality, and assurance of maintenance of competency that there should be national standards of licensure and recertification.

We urge especially that requirements for continuing professional education—with an appropriate accreditation mechanism for such curricula—be incorporated into these standards.

The Friends Committee on National Legislation hopes that the Congress will support the provisions of the proposed legislation which offers incentives to education of practitioners of primary care, the various types of which I shall discuss in a moment.

Key elements of this legislation should be the requirements: (1) that a primary care service system be administered by the educational institution in order that students be educated to manage the common problems for which patients seek or need care, and (2) that, when need can be shown, construction funds be provided to permit the educational institutions to build the facilities in which such primary care education would take place.



It is crucial that these provisions not be rigid, imposing constraints which would limit the benefits derived from a diversity of experiences out of which the most effective approach to a strategy for primary care education would emerge.

I would now like to focus on a specific feature of this legislation which we hope will be changed, namely, the emphasis on the supply of doctors as a solution to the country's health care needs. We find the evidence to be lacking that enlarging the size of medical school classes, even with the requirement that specific numbers of the graduates enter primary care specialties, will reverse the current trend of diminishing availability of primary care services.

Indeed, it is apparent that despite doubling the numbers of medical school graduates and importing thousands of physicians there has been an increasing drift away from the practice of primary care. Even in areas where the doctor/population ratio suggests adequate supply of physician manpower, there is still evidence of unavailability, high costs, and unsatisfactory care.

Instead of responding by the numbers, models of a proper response by the health care system have shown how effectively health care teams of nonphysicians together with physicians provide primary care, that is, usual office visits for diagnosis, treatment, prevention, and counseling, plus features of such which are not usually included, particularly humane, caring, sympathetic responses to anxiety and stresses of life.

We know you are familiar with this concept, often referred to pejoratively as "paramedical," or physician extenders, or allied health personnel, but I would like to cite some documentation which supports our contention that the legislation Congress should enact must provide incentives for expanding the numbers of so-called new health professionals rather than increasing the numbers of physicians.

Only last week the Journal of the American Medical Association printed an article by a physician in Jamestown, N.Y., a rural area in the southern tier of the State, who reported that in the Jamestown Medical Clinic a physician working a 40-hour week provided 20,266 office visits per year. As one compares that number, nearly 21,000 office visits, with the average volume of patient visits per year, reported by the AMA to be about 7,000 in an average physician's work week of 50 to 55 hours, one might argue that this tripling of productivity could be the basis of legislation which reduces medical school enrollment by two-thirds. In fact, before advocating such a drastic reversal of present policy, it would be necessary to consider how Dr. Voltmann achieved this remarkable feat.

What he did was to hire six nurse practitioners who were fully competent to perform physical examinations, record in a problem-oriented format the data and histories of their patients, and do laboratory work.

By working as a team, the six nurse practitioners and one physician provided a volume of patient visits which would have required nearly four physicians.



Parenthetically, I would point out that the team of the Jamestown Clinic accomplished more than the comparable volume of physician services because nurse practitioners provide a different kind of visit, namely, in addition to the data gathering and assessment of the medical status they are trained to provide the caring, advising, counseling and education functions so vital to effective health services.

One could ask, why not meet the needs of patients of Jamestown Clinic by adding three more physicians to the one already there? The legislation being proposed would seem to see that as the solution to Jamestown's patients' needs. If that had been the approach at Jamestown, the clientele would have had their needs met by 1984 for that is how long it takes to move from legislative entitlement to implementation through 4 years of medical school and a minimum of 3 years postgraduate training in a primary care specialty.

Dr. Voltmann did not wait 8 years. He achieved his aims in 12 weeks of training nurses who were already available and could receive additional training in that time according to a now fairly standardized curriculum being provided by nearly 150 programs to train nurse practitioners.

The approximately 4,000 graduates of such programs will soon be reinforced by another 2,000 who are currently enrolled. In addition, the 48 AMA accredited programs to educate physician's assistants have now increased the numbers of new health practitioners by another 3,000.

If one uses Dr. Voltmann's data, these would be the equivalent of increasing the Nation's medical school output by about 4,000 primary care physicians or, in other words, there has been an amplification of the supply of services of primary care physicians by an amount equivalent to about twice the output of primary care practitioners supplied by U.S. medical schools last year.

These extrapolations, however tenuous, lead us to urge on the basis of timeliness, as well as relative costs of their education, that the support of manpower training not be couched solely in terms of physician supply and training. Rather we ask that the contingent requirements for educational institutions be more broadly directed with emphasis on the education of the team members. Thus, institutions which are responding to the national need by producing health associates, nurse practitioners, physicians' assistants, Medex, Primex, or any of the other nonphysician primary care practitioners in addition to physicians, should be seen as fulfilling the objectives and thereby eligible for support.

Furthermore, the narrow focus of qualifying institutions being only schools of medicine should be dilated to recognize the varieties of administrative arrangements which different institutions of higher education have developed.

Whether these educational arrangements be solely within a medical school or be in a multidivisional combination in intra- or interinstitutional arrangements should not preclude eligibility for support. We

believe that acknowledgment of existing educational structures necessitates a change in the wording.

Finally, we would like to comment on the most difficult aspect of the proposed legislation, viz, the quotas which dictate numbers of primary care practitioners and the students who would receive financial aid.

We believe that there are moral aspects of this issue, and perhaps questions of constitutionality as it is proposed.

The Friends Committee on National Legislation has already stated that it favors reallocation of manpower according to regional needs so that we support the principle of assigning medical school graduates as a quid pro quo for educational support. Nevertheless, unless all graduates are required to serve, we cannot support this measure. To fail to recognize all practitioners as part of the Nation's resources and to fail to recognize that all, regardless of their ultimate career pathways, are part of a system which must respond to the Nation's needs is to perpetuate the present shortfall in the professional commitment to serve as a national resource.

Furthermore, the system of selecting by volunteers or lottery is unfair to the students as well as to those who are paying taxes which go to the education of all of these students, whether or not they are recipients of scholarships.

Senator KENNEDY. Would you support a requirement for all medical students to serve in underserved areas?

Dr. PETERSON. Senator, I would support a requirement for all health practitioners of whatever category to serve as part of a national system in which we recognize needs throughout.

I contend that just as in the area of Appalachia and South Dakota, there are underserved areas in the areas which numerically have a high ratio of physicians to population. I think that everybody ought to be there. We need surgeons doing their thing as well as we need primary care practitioners.

Senator KENNEDY. It does not bother you to have had a system that would have required every medical school graduate to serve in underserved areas, that is what we had last year.

Dr. PETERSON. You keep referring to underserved.

Senator KENNEDY. Whatever definition that you put, medically underserved areas.

The point I am getting at, the Friends would support a—some have called it a—"doctor's draft?"

Dr. PETERSON. I recognize what that term "draft" connotes, but I think it would be appropriate that 100 percent of health workers should be involved in service to the Nation's health service.

Accordingly, we urge that there be required of all health workers who provide direct patient care, including dentists, nonphysician practitioners of primary care, et cetera, a period of service, perhaps on the basis of 1 year of service for 2 years of education, according to assignments which are made in consideration of regional manpower



needs, individual graduates' preferences for region and type of practice, and the phases of training at which the period of service would be provided.

We do not believe that this is a wild suggestion. An analogous scheme operated in relationship to the supply of physicians in the so-called Berry plan for about 15 years, and despite shortcomings of that arrangement, the assignment of physicians and the fulfillment of perceived needs were coordinated to mutual benefits.

Again, we would like to make the point that these should not be requirements for physicians only.

In closing, we would like to ask that the Congress consider carefully whether this legislation and similarly restricted legislation should continue to be developed in isolation from legislation regarding the other elements of the health care system.

Does it make sense to address the question of how many physicians should be in primary care without also asking in what organizational relationship and reimbursed by what financial mode?

In other words, we plead again for a coherent health plan, which recognizes the interdependence of the elements Congress is now addressing separately, namely HMO development, occupational safety and health, national health insurance, biomedical research, nursing education, veterans health benefits, public health education, environmental protection standards, quality of health care, et cetera.

We are pleased that we have been able to offer comment on this vital legislation. We are not unaware of the difficulties this issue poses for Members of Congress because of the crosscurrents of various interest.

Our commentary has been offered in the hope that we speak for only one self-interest, that of the people of the United States.

Senator KENNEDY. I think that is helpful. You know my own view about the service. Given our Nation's problems I think we ought to expect young graduates from our law schools to work in our court systems and on criminal justice. We have important human needs in this country and society. Quite frankly it does not trouble me to expect that service.

With the kinds of national leadership we have we must obviously expect to get through a voluntary type of program. But I am sufficiently troubled by the nature and dimension of the problem to be willing to try it some other ways.

I can understand your objection as well as your objectives. I have made the same arguments myself.

Dr. PETERSON. Senator, I think our experience has been, particularly with these young students coming into the programs for nonphysician practitioner roles, that they are committed and they would be willing to serve.

I believe many medical students in the health professions would do so if there were a system which was equitable across the board.

Senator KENNEDY. Fine. Thank you.

[The prepared statement of Dr. Peterson follows:]



## TESTIMONY OF Malcolm Peterson

on behalf of the Friends Committee on National Legislation

before the Subcommittee on Health of the Senate Committee on

Labor and Public Welfare on Senate Bill numbers S989 - S992,

S996, S1357 and HR5546, October 29, 1975

Mr. Chairman, my name is Dr. Malcolm Peterson. I am presently Dean of the School of Health Services of the Johns Hopkins School of Medicine, but I am pleased to be appearing here ~~today~~ as spokesman for the Friends Committee on National Legislation. The Friends Committee on National Legislation exists to serve the interests of members of the Religious Society of Friends, commonly called Quakers, in national legislative and administrative activities having to do with both international and domestic policy. This Committee is widely representative of Friends' groups around the nation, but does not purport to speak for all Friends, who cherish their rights to individual opinions. My comments on pending legislation regarding the fiscal support of educating providers of health care for the future reflect the concerns of a vast number of American citizens who, through their religious affiliations, have expressed their agreement on the principles set forth by this legislative committee in its statement of "Principles of Health Care in the United States" (appended).

In expressing our dissatisfaction with the proposed legislation I do not wish to lead the members of this Committee to think we oppose the goals of the legislation, nor do we fail to recognize that there is an imperative for immediate action by Congress if current authorization for Federal fiscal support of health manpower education is not to be abruptly terminated with disastrous consequences. Indeed, the Friends Committee on National Legislation believes that the manpower needs of the nations' health care system can be met only by Federal support of the education of this national resource - the practitioners who provide health services -, and we believe that the special needs created by maldistribution of practitioners and imbalances of the numbers of specialists require that Congress impose constraints when providing this support. Thus, we are testifying today in support of the Senate bill with the qualifications I would now like to discuss.

These legislative proposals in support of more and better primary care practitioners incorporate some long needed and essential features affecting the supply of health manpower. We concur that only those practitioners who have demonstrated a single standard of competency should be certified to function in the health care system, and therefore we support the provision that a single standardized examination (plus English fluency test) should be required of all foreign medical graduates, an examination which is identical to that required of all graduates educated in U.S. schools. Further we agree that to achieve consistency, a universal standard of quality, and assurance of maintenance of

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competency that there should be national standards of licensure and recertification. We urge especially that requirements for continuing professional education (with an appropriate accreditation mechanism for such curricula) be incorporated into these standards.

The Friends Committee on National Legislation hopes that the Congress will support the provisions of the proposed legislation which offers incentives to education of practitioners of primary care, the various types of which I shall discuss in a moment. Key elements of this bill should be the requirements: (1) that a primary care service system be administered by the educational institution in order that students be educated to manage the common problems for which patients seek or need care, and (2) that when need can be shown construction funds be provided to permit the educational institutions to build the facilities in which such primary care education would take place. It is crucial that these provisions not be rigid, imposing constraints which limit the benefits derived from a diversity of experiences out of which the most effective approach to a strategy for primary care education would emerge.

I would now like to focus on a specific feature of this legislation which we hope will be changed, namely, the emphasis on the supply of doctors as a solution to the country's health care needs. We find the evidence to be lacking that enlarging the size of medical school classes, even with the requirement that specific numbers of the graduates enter primary care specialties, will reverse the current trend of diminishing availability of primary care services. Indeed, it is apparent that despite doubling the numbers of medical school graduates and importing thousands of physicians there has been an increasing drift away from the practice of primary care. Even in areas where the doctor/population ratio suggests adequate supply of physician manpower, there is still evidence of unavailability, high costs and unsatisfactory care. Instead of responding by the numbers, models of a proper response by the health care system have shown how effectively health care teams of non-physicians together with physicians provide primary care, that is, usual office visits for diagnosis, treatment, prevention, and counselling, plus features of such which are not usually included, particularly humane, caring, sympathetic responses to anxiety and stresses of life. We know you are familiar with this concept, so often pejoratively referred to as "paramedical" or "physician extenders", but I would like to cite some documentation which supports our contention that the legislation Congress should enact must provide incentives expanding the numbers of so-called new health professionals rather than increasing the numbers of physicians.

Only last week the Journal of the American Medical Association printed an article by a physician in Jamestown, New York, a rural area in the Southern tier of the state, who reported that in the Jamestown Medical Clinic a physician working a 40-hour week provided 20,266 office visits. <sup>14</sup> If one compares that number, nearly 21,000 office visits, with the report by the AMA which found the average annual volume of patient visits per year to be about 7,000 in an average work week of physicians of 50-55 hours, One might argue that this tripling of productivity could be the basis of legislation which reduces medical school enrollment by 2/3. In fact, before advocating such a drastic reversal of present policy, it would be necessary to consider how Dr. Voltmann achieved this remarkable feat. What he did was to hire six nurse practitioners who were fully



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competent to perform physical examinations, record in a problem-oriented format the data and histories of their patients, and do laboratory work. By working as a team the six nurse practitioners and one physician provided a volume of patient visits which would have required nearly 4 physicians. Parenthetically, I would point out that the team at the Jamestown Clinic accomplished more than the comparable volume of physician services because nurse practitioners provide a different kind of visit, namely, in addition to the data gathering and assessment of the medical status they are trained to provide the caring, advising, counselling, and education functions so vital to effective health services.

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Finally, we would like to comment on the most difficult aspect of the proposed legislation, the quotas which dictate numbers of primary care practitioners and the students who would receive financial aid. We believe that there are moral aspects of this issue, and perhaps questions of constitutionality,



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as it is developed in the proposal. The Friends Committee on National Legislation has already stated that it favors relocation of manpower according to regional needs so that we support the principle of assigning medical school graduates as a quid pro quo for educational support. Nevertheless, unless all graduates are required to serve we cannot support this measure. To fail to recognize all practitioners as part of the nation's resources and to fail to recognize that all, regardless of their ultimate career pathways, are part of a system which must respond to the nation's needs is to perpetuate the present shortfall in the professional commitment to serve as a national resource. Furthermore, the system of selecting by volunteers or lottery is unfair to the students as well as those who are paying taxes which go to the education of all of these students, whether or not they are recipients of scholarships. Accordingly we urge that there be required of all health workers who provide direct patient care including dentists, non-physicians practitioners of primary care, etc. a period of service, perhaps on the basis of one year of service for two years of education, according to assignments which are made in consideration of regional manpower needs, individual graduates' preferences for region and type of practice, and the phases of training at which the period of service would be provided. We do not believe that this is a wild suggestion. An analogous scheme operated in relationship to the supply of physicians in the so-called Berry plan for about 15 years, and despite shortcomings of that arrangement the assignment of physicians and the fulfillment of perceived needs were coordinated to mutual benefit. Again, we would like to make the point that these should not be requirements for physicians only.

In closing we would like to ask that the Congress consider carefully whether this legislation and similarly restricted legislation should continue to be developed in isolation from legislation regarding the other elements of the health care system. Does it make sense to address the question of how many physicians should be in primary care without also asking in what organizational relationship and reimbursed by what financial mode? In other words we plead again for a coherent health plan which recognizes the interdependence of the elements Congress is now addressing separately namely, HMO development, occupational safety and health, national health insurance, biomedical research, nursing education, veterans health benefits, public health education, environmental protection standards, quality of health care, etc.

We are pleased that we have been able to offer comment on this vital legislation. We are not unaware of the difficulties this issue poses for members of Congress because of the cross currents of various interests. Our commentary has been offered in the hope that we speak for only one self interest, that of the people of the United States.

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FRIENDS COMMITTEE ON NATIONAL LEGISLATION  
245 Second Street, N.E.  
Washington, D. C. 20002

# PRINCIPLES OF HEALTH CARE IN THE UNITED STATES OF AMERICA

*As Friends labor around the world to alleviate human suffering and to ensure that human beings are accepted for their personal worth, free from any discrimination, we find ourselves faced with inequities in both the manner in which people of our own country receive health care and in the opportunities to participate in the health care field as either consumers or providers of health services.*

*Urgently needed is the development of a rationally designed, integrated, comprehensive and responsible system for providing to all residents an adequate level of quality health care.*

*There are many people who cannot find or afford needed health care in the United States of America today. In the face of what is possible, it is nothing short of immoral that we do not have a health care system that can meet these needs. The Friends Committee on National Legislation proposes, therefore, the following principles for a nationally coordinated Health Care System.*

## GLOSSARY OF TERMS

**COMPREHENSIVE HEALTH CARE** includes all types of health services now practiced or provided, but not limited to them.

**HEALTH CONSUMERS** or users are the general public, including those described as providers.

**HEALTH PROVIDERS** include all health practitioners (physicians, nurses, nurse practitioners, technicians, nutritionists and others), hospital, clinic and nursing home proprietors and administrators, insurers, drug producers or dispensers.

**HEALTH MAINTENANCE ORGANIZATIONS** are medical organizations offering comprehensive health services at a fixed monthly or annual price — the principal alternative to traditional fee-for-service medical practice.

## 2. POSITIVE HEALTH CONCEPT

The system should begin with a concept of positive health which seeks the well-being of the whole person, emphasizing the development and maintenance of good health through consumer education, preventive health care and community health action programs. We recognize that each human being is both an individual with personal potential, problems, and responsibilities, and at the same time a part of a total social and physical environment.

## 3. GOOD HEALTH CARE FOR EACH PERSON

The system of health care must assure good health care to all residents nationwide without any discrimination on the basis of sex, race or the ability to pay.

## 4. CONSUMER PARTICIPATION

The system should be truly responsive to the real and felt need of the consumers of health services. Responsiveness grows from substantial direct consumer participation in the responsibility for decisions affecting the priorities in local health care delivery, the proportions among the different kinds of health personnel, the location, operation, and facilities of health care delivery, the location and operation of health personnel training, and the methods of financing, controlling, and evaluating all aspects of the

services. Health providers (professional and other) should likewise participate actively. The system should encourage personal and community initiative and responsibility.

## 5. INDIVIDUAL RESPONSIBILITY

All consumers of health care should be educated and encouraged to: Take responsibility to inform themselves on the basics of maintaining their health conscientiously follow these basics so as to enjoy good health; join a local health services unit of their choice to secure regular assessment of their health condition; use the health unit services to meet illnesses, injuries and disabilities; take their share of responsibility as good members of the unit; and cooperate intelligently with health providers of their choice.

## 6. FREEDOM OF CHOICE

Options as to type and method of medical care, such as osteopathy, homeopathy, etc., should continue. There can be no coercion to participate in any particular system, either of consumers or providers. Doctors and other professionals should be free to engage in private practice and consumers to patronize them. A rational design would include continuity of care for the consumer by the health provider of his choice.

## PRINCIPLES

### 1. THE ESTABLISHMENT OF A NATIONALLY COORDINATED HEALTH CARE SYSTEM

A nationally coordinated, socially responsible, publicly accountable, comprehensive health care system should be established for the promotion of health, the prevention of disease, the diagnosis and treatment of injury, disease or illness, and rehabilitation.



#### 4. NEW APPROACHES

Within these principles new approaches to research, delivery, training, access, payment, financing, and all other aspects of the health field should be carefully explored, tried out and evaluated. New approaches should be evaluated particularly as to sensitivity to human need, rationale of organization, and cost effectiveness. Special attention should be given to problems of the aging and those in terminal illness.

#### 8. HEALTH ASSESSMENT AND MAINTENANCE

Every individual and family should be encouraged to enroll in a local health unit and thus establish an ongoing relationship with a team of local health providers. Within the limits of the team's and unit's resources, these consumers should have access to regular health assessment with continuity in their health care. Special health problems may require referral to appropriate specialists or facilities including paramedical in or beyond the local area.

Individuals or families moving to another location should be encouraged to transfer as quickly as possible to a health unit in the new location and provision should be made for prompt transfer of their health record.

#### 9. LOCAL HEALTH AND SERVICE DELIVERY

The largest field for innovation is the delivery of health care in local units. Groups should be encouraged to create and improve health facilities, choosing among different patterns of health care delivery. Such diversity will help prevent the undesirable aspects of bureaucracy.

Local health units, both urban and rural, should be arranged so that consumers can obtain health and medical services promptly and have a choice among local units.

Each unit also should have responsibility for collecting and disseminating accurate informa-

tion concerning local health needs and services as a part of a nationwide reporting system. This information should be used to guide health care delivery programs, public education programs, manpower training programs, and location and type of facilities.

#### 10. REGIONAL FACILITIES

Regionally, within the United States, existing programs and facilities should be coordinated and new programs developed to meet specialized health needs, conduct research, and recruit, train, and develop personnel.

#### 11. FEDERAL PARTICIPATION AT THE NATIONAL LEVEL

Everyone must have prompt access to good health care and the federal government must carry the legal responsibility to see to it that such provision is made. The Health Care System on the national level should provide only those direct services which cannot be supplied feasibly on any other level of the health care system.

Primarily, it should be responsible for the encouragement and coordination of research, the establishment and enforcement of minimal standards of health care, regulations for health services, guidelines for the management and accountability to the general public and the assimilation and distribution of health information gathered throughout the health care system. These standards and guidelines should be established with the participation of regional and local councils. The national council should include some representatives from each regional council, some of whom should be consumer participants. In order to achieve sensitivity to all points of view all national, regional and local councils should be encouraged to make decisions on the basis of consensus. Coordination is achieved in part by participation in planning and by open availability of information. The national council should have access to health-related information developed by governmental organizations.

The diversity of local units, although having great advantages, has some drawbacks. Some people may not have adequate choice of units. Quite a few may be left out. These are apt to be the temporarily employed, unemployed, widowed, dependents, migrant workers, retired persons, etc. They may lack eligibility or group membership or the funds for payment. In all such cases suitable arrangements must be made with an existing private or public facility.

There may at any time be quite a few health delivery facilities which do not live up to the minimal standards for health care. The framework of law must provide for creative ways to bring these units up to par.

#### 12. HEALTH PERSONNEL DEVELOPMENT AND DEPLOYMENT

The complete range of health providers should be included in any such system. The system should be open to new and alternative modes of beneficial therapy and seek to produce and provide the proper balance of doctors, dentists, and other skilled providers of health services based on the health needs of the country. Also, there must be a commitment to place the persons in jobs where they are needed, and if possible for which they are most adequately prepared. The system should provide for a wide variety of health careers with open access through education and training. Especial consideration must be given to removing discriminatory restrictions of an economic or professional nature which deny to many of our society the opportunity to train for health professions. New roles in the field of primary health care delivery should be developed which would provide quality health services while permitting health professionals to use their skills in an optimal way.

The system should provide the means whereby health providers of all levels of experience will serve in areas of greatest health



need, such as ghettos or rural areas with insufficient personnel. Patients, with their consent, should expect some of their care to come from health providers in training.

### 13. HEALTH INFORMATION

We believe that a health problem is anything which adversely affects the physical or mental health of an individual or community. The system, therefore, should have the right and the responsibility to bring to public attention the practices and programs — public and private — which have an adverse effect on national or local health. Consumers need maximum information about family planning, health, accidents, disease and disability. People also need to develop appropriate skills to promote their own health, care for disease and disability, and utilize health services properly. Special attention should be given local needs, including environmental health concerns, and education on health problems.

### 14. EFFICIENCY OF THE SYSTEM

The most equitable and efficient use of our nation's limited health resources should be sought through comprehensive information, assessment, cost effective analysis, research, and planning for the future. The audit and review process should come from both within and without the system, through methods including both consumer and peer review. The system should be designed to minimize misuse.

Insurers may offer some savings in cost by provision of accounting systems for many types of health services. Cost effectiveness

should be the criterion for their use.

### 15. FINANCING HEALTH CARE

The mixture of public and private facilities requires several forms of financing:

a. Cooperatives, group practice facilities and other forms of Health Maintenance Organizations may well be financed by prepayment plans. Part or all of such payments may be made by the federal government, especially for those unable to do this themselves. The federal government should also help to organize and capitalize such group practice facilities where appropriate. Employer-employee plans can be financed by scheduled contributions.

b. Exemptions or reimbursement should not be made to local units or portions thereof not meeting federal standards. Facilities falling below minimal standards might, however, receive some federal funding or exemption when steps have been undertaken to meet these standards progressively and fully within a reasonable time.

c. Where federal funding or tax exemption is not sought, organizations or individuals may provide health services unless and until evidence of harm to patients or others can be proved.

d. Any necessary services or training provided by the federal government whether at the local, regional or national level, should be financed either out of general revenue or by a special progressive tax, or a combination of both that contains no special exemptions. These funds should be in the form of a permanent trust

rather than a one or multiple-year authority. Effective cost control and consideration of national priorities are fundamental parts of a comprehensive health system.

### 16. COOPERATION ON HEALTH MATTERS WITH OTHER COUNTRIES

The health system should arrange mutual exchange of health information and mutual assistance with other nations through the United Nations and its specialized agencies. Health and disease know no national boundaries.

\*\*\*\*\*

*We believe with John Woolman that to "labor for the perfect redemption from the spirit of oppression is the great business of the whole family of Christ Jesus in this world."*

*As Friends we must remind ourselves that "the sick and those caring for them have heard of our prayers. But let us not imagine. . . that a few sentimental good wishes from a distance are all that is needed. Whenever we intercede in prayer we must be prepared for an answer which places a practical obligation upon us. A prayer is always a commitment."*

Thomas F. Green, 1952

*In an attitude of caring we feel that these several principles should enlighten any rationally designed, socially responsible health care program.*

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Senator KENNEDY. Reverend Bagby, would you proceed?

Mr. BAGBY. Senator Kennedy, I'm simply here, first of all, to extend to you and the committee members the sincere apologies of Bishop Armstrong who was called back to his own area yesterday.

He simply asked me to see that the draft of his statement was presented to the committee.

I certainly do not propose to read it.

He wanted me to explain the interest that he has and that many of us in the United Methodist Church have on this issue, not the kind of expertise on the technicalities of the legislation, but we are concerned about some of the overriding governmental, social, and moral principles that are raised by the questions the legislation proposes.

The bishop does accompany his statement with a copy of the denominational statement which has several things to say—the statement that is official for the denomination has several comments to make, and calls for principles that apply to questions before this committee.

Primarily, one that calls for equal access to health care for all citizens.

We are aware in the church that this can be interpreted in absurd and impossible ways. But certainly it is probably our fundamental principle that there shall be equal access to health care for all citizens, appropriate to the circumstances in which people live.

Freedom of choice for consumers and physicians alike is an important principle, but it is limited by considerations of competence and responsibility.

The need for health planning, the need for governmental support for professional education in the health field, the need for paramedics, and the need for special incentives to attract health care professionals to shortage areas.

The bishop wanted me to make plain that his remarks beyond this are in his own responsibility. The denominational responsibility has to stand on its own.

He thought it somewhat ironic that he comes from a State, lives in a State, that has the worst of the 50 States' physician-to-population ratio, and he made some comments and has some statistics to bring that out.

Then he simply concludes the statement by affirming his conviction that it is not at all to be unusual or out of the way for the Federal Government to expect medical professionals and health care professionals should be required to give some portion of their service in underserved areas, however defined, in exchange for social and governmental support for their education.

I think that is the primary principle he would want to affirm.

Thank you.

Senator KENNEDY. That is very helpful.

The bishop also cautions us against tokenism in this matter, too, which I think is worthy to note.

This is a problem that needs attention and needs addressing. His expression of support for the concept is extremely valuable. And I think his words indicating that this should be something which is meaningful is also important.

I think that is very helpful.

Part of your statement here, which refers to this particular problem, is very useful. It indicates, obviously, a good deal of thought on this issue.

I think it is again very much appreciated to have this kind of expression of concern.

I hope that you will express my very deep sense of appreciation to the bishop for his willingness to make his views known to us on the committee.

Mr. BAGBY. I will gladly do so.

[The following statement was received for the record:]



STATEMENT OF BISHOP A. JAMES ARMSTRONG

Of The Dakotas Area

The United Methodist Church

Aberdeen, South Dakota

Before the Sub-Committee on Health

Committee on Labor and Public Welfare  
United States Senate

Honorable Edward M. Kennedy, Chairman

October 29, 1975

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

My name is A. James Armstrong. I am a United Methodist clergyman, bishop of the Dakotas Area, and live in Aberdeen, South Dakota. Attached are copies of a denominational statement adopted in 1972 by the General Conference of The United Methodist Church. This statement, in the process of addressing a number of the major problems of our health care system as a whole, includes brief descriptive material and a statement of principles that are relevant to the health personnel maldistribution problem. The United Methodist statement for example, calls for equal access to health care for all citizens, freedom of choice for both consumers and physicians, limited only by considerations of competence and responsibility, the need for health planning, the need for governmental support for professional education in the health field, the need for paramedics, and the need for special incentives to attract health care professionals to shortage areas.

I commend to the Committee this United Methodist Church "Statement on Health Care." It alone is official for the denomination.

My words, therefore, should not be attributed to the United Methodist Church, or to United Methodism in the Dakotas. I speak for myself.

Mr. Chairman, I submit this material as a resident of the state which bears the unfortunate distinction of having the lowest physician to population ratio in the entire nation. South Dakota has a population of 678,000 as of 1973. As of that year there were only 482 practicing physicians in the entire state; a ratio of 71 physicians per 100,000 people. The national average is 128 per 100,000<sup>(1)</sup>.

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(1)

National Health Insurance Resource Book, Staff of Committee on Ways and Means, April 11, 1974, p. 123.

-2-

The other state in the episcopal area I serve, North Dakota, reflects much the same problem. In North Dakota the ratio is 84 per 100,000 putting North Dakota sixth from the bottom among the 50 states.

For example, the North Dakota Division of Health Planning estimates a shortage of 182 primary care physicians,<sup>(2)</sup> of 37 Medical specialists,<sup>(3)</sup> and of 190 surgical specialists<sup>(4)</sup>. In more heavily populated sections of the country, such totals would doubtless seem insignificant. In the wide open spaces of North Dakota, sparsely populated as they are, these statistics become alarming.

I cite just a few more statistics to broaden the picture. North Dakota's supply of dentists is 30 per cent below the national average<sup>(5)</sup>. Ironically, North Dakota's supply of Registered Nurses is above the average national ratio<sup>(6)</sup>, but the state has a shortage of 750 Licensed Practical Nurses estimated by the Division of Health Planning<sup>(7)</sup>

Just a few more statistics to indicate something of the overall health personnel problem in the Dakotas Area:

In 1970 half of the counties in the Dakotas had fewer physicians in

- - - -
- (2) Memo, July 23, 1975, of Hiram Waterland, Division of Health Planning, Department of Health, North Dakota, p. 3.6
  - (3) Ibid, p. 4.3
  - (4) Ibid, p. 5.2
  - (5) DENTAL EDUCATION AND SHORTAGE OF DENTISTS IN NORTH DAKOTA, August 1974. Division of Health Planning, North Dakota State Department of Health, p. 5.
  - (6) Cf. Memo, July 23, 1975, op. cit., p. 8.11, 8.4.
  - (7) Ibid, p. 8.8.



-3-

them than they had in 1960<sup>(8)</sup>. In spite of millions of dollars in federal investment in medical education, of which my fellow citizens of the Dakotas have paid their fair share, the supply of physicians in the Dakotas has been worsening. For example, as of the end of 1972 there were 22 counties with a combined population of 67,800 people where one could not find a single resident physician<sup>(9)(10)</sup>.

Between 1968 and 1972 there was a net loss of 61 physicians in general practice in the Dakotas<sup>(11)</sup>. If it were not for foreign medical graduates this loss would have been heavier. In 1970 there were 161 foreign medical graduates in the Dakotas<sup>(12)</sup>. Of these 161 foreign medical graduates, 75 were not fully licensed<sup>(13)</sup>.

There is no approved medical school in either of the Dakota states, although there is an approved 2-year school of basic medical science at Vermillion, South Dakota with a total of 118 students in the 1972-73 school year<sup>(14)</sup>.

- - - - -
- (8) DHEW Data: Bureau of Health Resources Development, July 1974. See Health Professions Educational Assistance Act of 1974 - Committee on Labor and Public Welfare Report No. 93-1133, Sept. 3, 1974, pp. 502, 509.
  - (9) National Health Insurance Resource Book, Ibid. p. 119.
  - (10) Ibid. p. 120.
  - (11) Ibid. p. 121.
  - (12) "Foreign Medical Graduates in the U. S.," American Medical Association, 1970. cf. National Health Insurance Resource Book, p. 133.
  - (13) Ibid. p. 135.
  - (14) National Health Insurance Resource Book, p. 139.

-4-

I believe these statistics speak for themselves. We have a serious shortage of medical personnel. When such statistics are seen in human terms they indicate a disheartening and sometimes tragic story of denial of needed health care with its attendant consequences of unnecessary illness because preventive care is not available, of unnecessary illness where medical care is too distant and delayed, and sometimes of unnecessary death when timely health care is unavailable, especially in emergency situations.

These facts are recounted easily, but the human realities behind them are hard, tragic and unnecessary in a nation that boasts second-to-none medical and fiscal capabilities.

It seems obvious to me that a mere continuation of present policies for financing health care and the education of health care professionals will not solve the problems of maldistribution of health care personnel in the Dakotas. I know there is strong resistance among health care professionals to any proposal for an imposition of direct governmental authority in the matter of physician location, and I don't believe such a system needs to be imposed in the United States in order to solve our admitted problems. But it is obvious to me that both our society and the health care profession share responsibility for overcoming the serious problems represented by maldistribution of medical personnel, and that some degree of regulation, some setting of limits, is necessary. It is also obvious that current policies are not solving the problem. Therefore, it seems clear that the proposals currently before this committee requiring a certain proportion of entering medical students to agree to serve in medically underserved areas for some period of time in exchange for federal scholarship aid, is a reasonable and fair approach.

-5-

I am not capable of commenting on the technicalities of such legislation; e.g., the exact and just proportion of service years to scholarship aid given. I do suggest however that the requirement of some period of medical service in underserved areas in exchange for the receipt of federal scholarship aid is reasonable and fair. I would also add that a required sufficient percentage of medical school graduates to meet the total need for service in underserved areas is essential.

I hope this Committee and the Congress as a whole will avoid the sort of cautious tokenism in this matter that will surely fail to provide sufficient personnel to move the country effectively toward the goal of equal availability of health care services for all our residents.

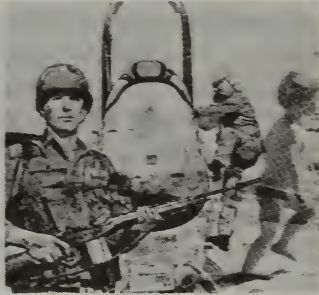
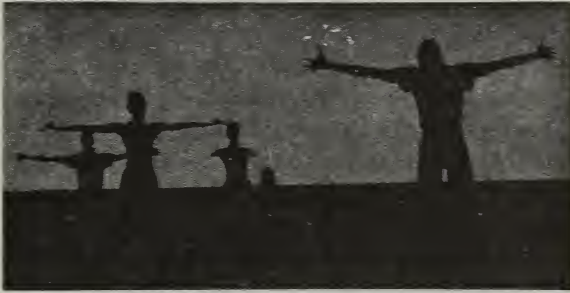
I thank you, Mr. Chairman, for this opportunity to share my views with the Committee.



# HEALTH CARE



Only the General Conference speaks officially for The United Methodist Church. This statement, one section of an omnibus resolution on health, welfare and human development, was adopted by the 1972 General Conference meeting in Atlanta, Ga.



In order to provide basic needs such as food, clothing shelter, education, health care and other necessities, ways must be found to more equitably share the wealth of the world.

We applaud medical science for efforts to prevent disease and illness and for advances in treatment that extend the meaningful life of human beings. At the same time, we assert the right of every person to die in dignity, with loving personal care and without efforts to prolong terminal illnesses merely because the technology is available to do so.—from the Statement of Social Principles of The United Methodist Church.

# HEALTH CARE

We affirm that in an affluent society unimpeded access to adequate health care is a fundamental right of all citizens and is corollary to the right to life itself.

In spite of technological advances which have produced tremendous medical progress in the past twenty-five years there are many problem areas needing drastic attention and correction. Health care in the United States is described today as in a state of crisis. The signs of crisis are clear:

1. The health professions are seriously understaffed and unequally distributed.

2. Health facilities are over concentrated in some areas, under concentrated in others, non-existent in some.

3. In 1969 there were no physicians at all in 134 counties in 28 different states.

4. Some citizens receive inappropriate or unnecessary care while many others are denied access to basic services.

5. We realize mortality rates are not determined solely by available health services. Poverty, poor nutrition, poor housing and lack of education as well as automobile accidents, high cholesterol diet, smoking, the consumption of alcohol and the pace of our society are major contributing factors in mortality rates. Nevertheless, it is shocking to note that:

- a. In 1967 most industrial nations had lower infant mortality rates than the United States.

- b. Eighteen nations have a higher male life expectancy rate than the United States.

- c. There is gross disparity in health between the races in the United States, i.e., non-white infant mortality rates are



nearly double that for white infants.

d. People in poverty have three times the chronic sickness rates of those in middle and upper economic groups.

In spite of its great technical achievements, in spite of long hours of conscientious work on the part of the majority of those in the health care professions, the health care delivery system in the United States is seriously deficient. The costs of that relatively unplanned, unmanaged and uncontrolled system are rising at a frightening pace. The total health bill for Americans, combining private and public payments, rose from \$12.1 billion in 1950 to \$26.4 billion in 1960, \$38 billion in 1965, \$67.2 billion in 1970, and \$75 billion in 1971. If no changes are made in our present system of health care delivery, government officials estimate total health care costs for the United States in 1974 will reach \$105.4 billion.

Under the various legislative proposals to change the health care delivery system presently before Congress, there would not be a significant difference in cost. None of the proposed plans is projected to cost less than \$107.2 billion (Bennett plan) nor more than \$113.8 billion (Kennedy plan) in 1974. The significant cost differences in these plans is in the various degrees to which the public sector would participate. Under the present system the various government agencies would contribute \$43.1 billion in 1974. Under the proposed new plans the governmental agencies may be called upon to contribute as much as \$97.9 billion (Kennedy plan) or as little as \$45 billion (Bennett plan). Thus while the increase in total cost of health care projected in 1974 under all new plans is less than 10%, the tax burden could increase as much as \$54.8 billion in fiscal 1974. (A study of National Health Insurance Proposals, Office of the Actuary, HEW, July, 1971).

A significant portion of the rising costs of health care is due to increases of population, improved but costlier medical technology, wage improvements for health care workers long grossly underpaid, and new programs of health care for the aged and the poor who previously had far too little access to care. Another significant portion of the rise in costs, however, is due to inefficiencies, lack of planning, mismanagement in the system and fear of malpractice suits.

We have noted the variety of current legislative proposals for providing more and better health care for Americans. The proposals range from those which would restructure the system to those which would do nothing other than provide more money for the present system. We oppose such proposals as the latter, seeing profound need to effect economies and to reach greater efficiency in the methods by which health care may be planned, organized, administered, evaluated and financed. We believe Mr. Walter J. McNerney, President of the Blue Cross Association, is persuasive when he says: "Health systems are simply not self-regulating. They must be managed. To pour your money into the present system without changing that system, I think would be disastrous." (Statement to the Senate Committee on Finance, Tuesday, April 27, 1971).

Although we recognize that such complex problems cannot be solved quickly, we believe the following represent important principles for the necessary restructuring of the health care delivery system in the United States:

1. All citizens should have equal access to the best available health care, including preventive services, regardless of wealth, social status, or any other conditions.
2. No arbitrary limits should be set about a person's right to choose among available doctors and facilities for medical care, nor

should the doctors be hindered from choosing the type of medical practice they wish to engage in, provided adequate medical standards of competence and responsibility are met in both cases.

3. Health care should be comprehensive, including physical, dental, mental and emotional fields of practice, and should focus on prevention as well as treatment and rehabilitation.

4. National standards of health care service, including national standards of licensure, should be professionally established and kept under continual review and development.

5. There should be national standards, with policy making and planning carried out at regional, state, area and community levels.

6. Consumers should be represented on boards of professionals and public officials to design and administer every level of the national health care delivery system.

7. State and federal governments should increase their financial support for new medical, psychological, dental and nursing schools, in order to enlarge the supply of health personnel, with special attention given to applications from women and all ethnic groups.

8. Provision should be made for increased training and use of paramedical personnel under professional supervision and responsibility.

9. A universal program to provide all basic and necessary health care services should have costs shared by employers, individuals and general revenue funds. Such a program should be publicly administered. The health care industry and health care professionals may be paid for services in a variety of ways, with special incentives to attract health professionals to shortage areas.

Recognizing that new biomedical tech-



nologies, such as organ transplants and control of genetic defects, while offering rich potential for enhancing health, also place stress on traditional images and values about human nature, we encourage men of ethical concern in various relevant fields together to engage in the study and direction of these developments. Mental illness is a major health problem in all parts of the world. The Church is challenged to use its resources to make a major contribution to mental health and healing. We encourage our churches:

1. to engage in mental health education through
  - a. family life conferences
  - b. workshops on parent-child communication
  - c. premarital counseling
  - d. more adequate sex education;
2. to become involved in community programs for primary prevention of mental illness;
3. to work with other agencies to develop programs and facilities for the care of the mentally disturbed and retarded;
4. to develop pastoral counselling centers to minister to the troubled;
5. to foster cooperative efforts between ministers, physicians and other health professionals in the care of both the physically and mentally ill;
6. to promote the rapid establishment of community mental health centers;
7. to encourage the establishment and improvement of local and state mental care institutions.

Since universal national financing should be coupled with regional or local administrative units which will allow diversity and real independence, subject to certain basic national regulations, we call upon our churches to be alert to the new opportunities here. Church men and women may become involved in these new approaches

to a serious problem not only through community action and planning, but through volunteer service in medical centers and innovative ministries within their congregational life.

*Produced by:*

BOARD OF CHURCH AND SOCIETY  
THE UNITED METHODIST CHURCH

*Available from:*

SERVICE DEPARTMENT  
BOARD OF CHURCH AND SOCIETY  
100 Maryland Ave., N.E.  
Washington, D. C. 20002

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THE UNITED METHODIST CHURCH  
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15¢ each; 10 or more copies, 10¢ each; \$5.00  
per 100.

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Senator KENNEDY. We will hear from Ms. Burgess next.

Ms. BURGESS. Senator Kennedy, thank you for the opportunity to come and speak before you.

You have my prepared statement.

I will summarize it.

Senator KENNEDY. It will all be included in the record at the conclusion of your testimony.

Ms. BURGESS. I've included a blue sheet which gives the ratio of population to doctors in West Virginia. We have two of our counties which have no doctor at all.

Clay County did have a doctor. She was from Malaysia. I do not know her full name. She was called Dr. Su, and after a few months she went to a neighboring county because of a lack of medical support system there for her, which leaves Clay and Doddridge now with no doctor whatsoever.

You will notice that one of our counties has a ratio of over 10,000 to 1 doctor, Wayne County, and three counties with 1 doctor to 4,400 more or less.

Of the 1,791,000 people in West Virginia, only 561,400 have adequate access to doctors, and this is less than one-third.

You are aware that West Virginia is a mountain State, the only State in Appalachia that is completely mountain, so there are many problems that add to the difficulties of getting to the doctors even when they are there.

Senator KENNEDY. I think these statistics are very interesting. We had a report last year that showed that over the period of recent years many of our counties have lost physicians. I think whatever you could supply to show us where the trend is moving would be helpful. I am sure that it is getting worse down in West Virginia as it is in the other parts of the country.

But any material that you have that would show where that trend is moving in terms of West Virginia would be very much appreciated.

I think it is important to understand what you have experienced.

I do not want to trouble you with providing information that we have access to, but if you do have information on that point, please submit it later and we will welcome it.

Ms. BURGESS. Thank you.

There is a conflict in our State at this time about establishing another medical school with provisions built in that the doctor would serve in the rural areas.

There has been established a school of osteopathic medicine in Greenbrier County just north of us with the express view of having these doctors serve in rural areas.

I do not know that you would find the trend reversing. I do not know how these schools will be financed and whether they will be brought into fruition to bear on the problem.

Senator KENNEDY. I had a nice visit to the medical school probably in 1971, and enjoyed it very much.

Ms. BURGESS. Good.

Senator KENNEDY. I think it is a clear indication of the willingness of the State to try and do something about it.

But what happens in many instances, this happened in my own State, we are now developing a medical school in Massachusetts. An enormous



commitment of resources. And where the students are going to go is still very much a mystery.

I'm hopeful you have better luck down there.

Ms. BURGESS. The orange sheets are statistics on Monroe County, which is a very small rural county, nonmining, and the county which I serve.

The information is on age, it is on income, it is on the fact that so many of our younger women who used to help the people of the area in transportation and so on are now working.

Those are particular to my county.

I would like to speak at this point of my county, because I have a feeling we have a very unique situation there.

I have talked with the doctors in our center and they have given me some help in how they feel and some insight on what may have to bear on the problem that I have not heard here this morning.

Three years ago we received a clinic from the OH-9 program serving nine very poverty-ridden areas in southern West Virginia.

At that time we received two doctors. One of them served for a term of 2 years to forgive some of his medical expenses in medical school, and he since returned for further schooling.

One of the doctors was a native of Monroe County who came back from serving as a pediatrician in Shaker Heights, Ohio, with many years experience, and also experience in teaching with Western Reserve Medical School.

The doctor who replaced the first one was also an older doctor, more experienced. I say older, not in age, but in experience. He has served for many years here in the National Institutes of Health in cancer research and then in communicable diseases.

These are not young doctors who are serving. They are now helping to train students from Western Reserve University, who come for a short period of time in the summer to be experienced in rural medicine and see what is involved.

Our center is comprehensive. We have two programs that help with the financing.

One is a child and youth program funded by West Virginia for serving children and youth under 13.

This helps with the financing as does also the family planning.

Our clinic has a sliding fee scale for those who do pay.

I have mimeographed this and given it to you on page 2. Our center was criticized for this sliding fee scale, and yet from working with the older adults—which is my primary responsibility in the county—this is necessary if we are going to serve these low-income people. They do not have choices many times.

And so the financing of this center has helped it to be able to serve. They are now serving 7,600 and more people of the county and our population in the county is only 11,000 something.

So they are serving a major portion.

They have the only laboratory in the county. They have the only X-ray equipment, and they are able to refer our people to hospitals beyond the limits of the county, sometimes in Virginia, for the special needs that our patients have.

We have one nurse who has become a nursing assistant.

It is a step higher than a registered nurse and she is able to do some of the things that the doctors formerly did.

The clinic is supported by an OH-9 ambulance service, which would be necessary for transportation to the hospital facilities for emergency services and to the clinic itself.

As I worked the first 2 or 3 years to help furnish transportation, I became interested in this and through a group of retired persons in the American Association of Retired Persons chapter, we are now running a little two-bus system, 12 passengers to each bus, which goes over the county twice a month to furnish transportation, most of it to the clinic and other medical services.

I have given some statistics on the need for this.

As the income for the center becomes greater, they are required under the National Health Service Corps contract under which they serve to return more and more to the general funds of the Congress.

Last year they returned over \$11,000 to these funds and this year the figure will be between \$24,000 and \$25,000.

More space is needed at the clinic and if this money were to be allowed to be retained and used to expand the service, it could be used to good benefit.

As I understand it, and as the doctors understand it, the money is not even returned to the National Health Service Corps, it is returned to the general fund of the U.S. Government.

So this money, as clinic services become more self-supporting, is taken out of the use for medical service in an area where it is so desperately needed.

In our medical school in West Virginia, many of our students graduate with no experience whatsoever among rural people, in working with the rural person. I have to personally take an exception to the point of view of my two predecessors who spoke on this panel.

The experience of the doctors is that a compulsory term for the doctors would not answer the needs of the mountain people.

The mountain people are very independent and they are very, very much tuned to people, to persons, and they are not materialistic in their approach.

If doctors serve whose hearts are not in it, who do not accept them as people, and see them only as cases, then the doctors will have difficulty in being accepted.

This has happened in some of the mountain States.

This may not be true in some of the rural areas in other places, but our mountain people are very highly independent people.

If there were a compulsory draft of the doctors, the mountain people just may not respond to their ministry.

Senator KENNEDY. We do not have that in this legislation.

But it was thought that it would be the graduates from West Virginia Medical School and I suppose from Kentucky that would serve in underserved areas of Appalachia. It would be hoped, that those serving would be the sons and daughters of the neighbors of the people.

That would be the concept behind it. But, we are not proposing that now.

I know people have strong views about it. We do not want to confuse this issue.



Ms. BURGESS. As I understand it, the curriculum there is not really set up on a community oriented and general practice curriculum as it could be.

Our doctors refer to the University of Virginia as being outstanding in the structure of their curriculum and also having satellite teaching programs in Roanoke, expanding their area of teaching, and including other services to the students.

We also have in West Virginia a movement to get more physician assistants.

The medical profession is objecting to this because they want to license them so that a doctor has to physically be present in order for the person to serve, and the medical persons who have worked on this bill feel strongly that they can ably serve under their license the same way as the registered nurses do.

And physicians' assistants need to be licensed so that they can go beyond where the doctor is physically, out into areas where the doctor would not need to go, if we had more physician assistants.

Our State home for the aged is within the bounds of our county, so our two doctors are now giving one afternoon 5 days a week, to furnish medical services, they are alternating going.

And at this time they are serving and giving 24-hour service when necessary to 250 of the older adults there.

We now have the services of a psychiatrist in our mental health center for 2 days a month.

The caseload has tripled since she has been maintained, and many of the cases have been terminated since the people are enabled to function effectively, and go back to their work.

I would like to read one statistic from page 2.

In their 3 years of operation we have gone from 1 to 7 pacemakers in the county, from no chemotherapy to 15 patients on chemotherapy, and the immunization numbers have tripled. The laboratory is crucial in chemotherapy. Our clinic doctors felt that without the health center the patients would not have taken steps after the diagnosis to continue their treatment. They now have a caseload of 7,603, of whom about 250 are social security patients. This is in a county of 11,500 population.

One of our doctors is on civil service, the other Public Health Service. It was tragic to me to hear them say it is "scary" to have invested your entire career to serve in an area desperately needing their services and find the financial structure of the center so tenuous.

The costs of operating the clinic are not less than anywhere else, yet financial collapse could come at any time. Because of their limited funds they spend much time in pursuing whether patients can be financed by vocational rehabilitation, or cancer society or et cetera. Much of the funding for the OH-9 program serving nine very low-income counties has been reduced or terminated. Older, experienced doctors are not nomads like their younger counterparts, and need a greater financial security from the National Health Service Corps.

Thank you.

Senator KENNEDY. Thank you very much.

[The prepared statement of Ms. Burgess follows:]



REPORT TO THE SENATE HEALTH SUBCOMMITTEE

October 29, 10:00 a.m.

Room 4232

Dirksen Senate Office Building

by

Miss Beatrice R. Burgess  
Church and Community Worker of the United  
Methodist Church

Monroe County, West Virginia

Soon after our Monroe Health Center was begun in October, 1972, the administrator, Mrs. Nancy Gewirtz spoke to our Peterstown Valley AARP (American Association of Retired Persons). She made the comment that some of the patients now being seen by the two doctors hadn't been to a doctor since the last baby was born, 50 years ago. Everyone laughed knowingly, and I began to understand the depth of our situation regarding lack of medical care. When I asked, most of those present had either not had medical care for many years, or had just recently begun to get attention. I had already discovered the lack of transportation which was keeping many from getting to the clinic for needed medical attention.

As a Church and Community Worker with the United Methodist Church one of my responsibilities is to discover unmet community needs and to work to get community support and participation in meeting these. When I came to the county five years ago there were three doctors in Peterstown, one an eye specialist, and one doctor in Union. One of those three general practice doctors had her clinic in another county, leaving two doctors within the county to serve over 11,000 people.

In 1972 our old elementary school house in Union was remodeled and <sup>used</sup> for storage purposes and a clinic built to serve as a satellite medical center of the OH-9 medical center at Bluefield. Two doctors were brought here. Dr. Clark Hansbarger, One was a native who had become a pediatrician in Shaker Heights, Ohio, and who taught in the Western Reserve Medical School. The other was Dr. Henry Gewirtz who had just completed his residency and wanted to serve two years in an underserved area to obtain forgiveness of some of his scholarship loans. He has been replaced by Dr. Allen Gelderman who served in the NIH doing cancer research and then research in communicable diseases. He had recently worked with our University Medical Center in Morgantown, W. Va.

As I spoke to the doctors about their work one said our work load has doubled, and doubled and doubled. The Health Center has the only X-ray unit in the county and the only laboratory. In their 3 years of operation we have gone from 1 to 7 pacemakers in the county, from no chemo-therapy to 15 patients on chemo-therapy, and the immunization numbers have tripled. The lab. is crucial in chemo-therapy. They felt that without the Health Center the patients would not have taken steps after the diagnosis to continue their treatment. They now have a case load of 7603 of whom about 250 are Social Security patients. This is in a county of 11,500 population.

One of our doctors is on Civil Service, the other Public Health Service. It was tragic to me to hear them say it is "scary" to have invested your entire career to serve in an area desperately needing their services and find the financial structure so tenuous. The costs of operating the clinic are not less than anywhere else, yet financial collapse could come at any time. Because of their limited funds they spend much time in pursuing whether patients can be financed by Vocational Rehabilitation, or Cancer Society or etc. Much of the funding for the OH-9 program serving 9 very low income counties has been reduced or terminated. Older, experienced doctors are not nomads like their younger counterparts, and need a greater financial security from the National Health Service Corp.

The Monroe Health Center is operated on a sliding fee scale because of the low income level of many of the residents. Income information is included in an appendix. Thirty percent of their cases are financed from Medicare and Medicaid, 30% are write-offs and 40 % pay some part or all of their fees.

The fee scale is as follows: No. Family Members

| Annual Income   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | + |   |
|-----------------|---|---|---|---|---|---|---|---|---|
| 0 - \$1700      | A | A | A | A | A | A | A | A |   |
| \$1700 - \$1999 | A | A | A | A | A | A | A | A | A |
| \$2000 - \$2799 | B | A | A | A | A | A | A | A |   |
| \$2800 - \$3599 | B | B | A | A | A | A | A | A |   |
| \$3600 - \$4499 | C | B | B | A | A | A | A | A |   |
| \$4500 - \$4999 | C | C | B | B | A | A | A | A |   |
| \$5000          | C | C | C | C | B | B | A | A |   |
| Above \$5000    | D | D | D | D | D | D | D | D |   |

- A - Pay what you can to \$5
- B - \$5 - \$10 max. inclusive per visit
- C - \$10 - \$15 max. inclusive per visit
- D. Usual customary fee



The two programs which help greatly with financing are the Child and Youth program for the medically indigent and the Family Planning service. Monroe County is the only county in the state where the entire county receives the Child and Youth program for those ages 1 through 13. The Family Planning financing comes from the West Virginia Maternal Child Health program. Federal funds are received through the OH-9 program. The rural counties cannot support the centers because our farmers have not made much money in our American society. When government funding is withdrawn then these doctors will have to leave the area to return to the cities. Doctors should not have to face financial disaster and complete disruption of their career by such tenuous financial support of the medical centers from which they serve the rural communities.

Communities must be enabled to support medical centers, and must also give encouragement and support to the doctor and his family. This has happened in Monroe County, the doctors find the community attractive. A retired doctor, Dr. Margaret Ballard, gives a home for use of students who come from Western Reserve University for study and experience in this area. The students, however, must buy their food and meet other financial needs.

In a state which has a large older adult population there is no senile geriatric facility except the state mental institution. In the southern part of West Virginia there are no intermediate nursing facilities. The clinic offers home health services, but these are inadequate to the need due to lack of support facilities.

In addition to more permanent financial support for medical centers in rural areas medical schools must be enjoined to meet the needs of rural people. In our University of West Virginia Medical School students are graduated who have never spent a day serving rural areas and meeting the needs of rural persons. How can they know whether they would welcome service in a rural community?

100

Our center has served students who wish experience in rural medicine. With the addition of two rooms onto the clinic and additional time from the doctors a teaching program could be incorporated into the work of this center. Those who become rural doctors have generally been raised in rural areas. More intensive recruitment and scholarship support must be given to those who know the problems of rural areas and persons.

The most fruitful investment comes from internships and residencies. With this comes commitment just at the time a commitment is necessary. The quality of the school students come from does not become the deciding factor in choosing a rural medicine career, but the love of the student for the people, and vice-versa. In order to discover this, more students must be exposed to rural medicine. However, a draft does not seem to be the solution, it is interest. Medical schools should incorporate elective studies in rural communities so those interested could explore further.

Mountain people are a different people. "Yesterday's People" by Jack Weller and "Mountain Heritage" from the West Virginia Arts and Crafts Association describe in detail the character of mountain persons which is so highly independent and attuned to persons. The mountain people have never responded to the materialistic values of life so rampant in the rest of America. They must be known as persons, especially by their doctors. Students trained in assembly line medicine instead of family and community oriented practice find themselves being accepted with great difficulty.

West Virginia has great need for a program of physicians assistants. Bills have been introduced in the legislature. At this time the medical profession wishes to do the licensing, and to grant this only under the immediate and physical direction of a doctor. As nurses do their own licensing and practice within that license, so this is needed in order for medical assistance to be in rural communities. These assistants work within the realms of their

license and under the telephone or radio direction of a doctor, and refer to the doctor or medical center those cases beyond the realm of their expertise. Federal support of this program would send medical assistance to many rural areas not now being served. Alderson-Broadbent College, in Phillippi, W. Va. has a four-year course for physicians' assistants, one of the finest in the country. Yet those graduates go from this area of such desperate need to other states because they cannot function in West Virginia as they have been trained. Bowman Gray and Duke, both in North Carolina have excellent two year programs for physicians' assistants.

The University of Virginia has a comprehensive family practice and community oriented practice. It has a satellite teaching center in Roanoke. With more rooms and additional financing for teaching the comprehensive center in Monroe County, with its experienced physicians could easily become a teaching center for rural medicine. A trailer for living facilities near the center would be a must for residents or interns in rural areas where housing is inadequate.

Because of the financial stipulations under which the OH-9 operates this Monroe Health Center must return \$24,000 each year from its meager income into the general treasury of the government. This money should be allowed to remain in the National Health Service Corp. treasury to be reinvested in rural medicine. Additional rooms are needed at this time at this center, but because of this burden built within the financial support, they cannot be obtained. Monies generated by rural medical facilities should be put into expanding these services, and broadening their scope. Rural medical service could be made much more attractive by strengthening the facilities and related support factors for doctors and the communities they serve.



One of the strengths of this satellite center is that it serves an entire county with comprehensive services. It is tied in with all county and state programs. Its clinics for Family Planning and Child and Youth services are unique since they are not scheduled at one time, making greater the transportation difficulties. Any person can come at any time for these services.

Our doctors have gained a great reputation for diagnostic abilities. Since we have no hospitals within the county, they must refer patients to Clifton Forge, Roanoke Virginia, and to Ronceverte, Bluefield and Princeton, W. Va. These are the nearest centers, although Roanoke is 75 miles away, 2 hours.

The OH-9 ambulance service has supported greatly the effectiveness of the center in using hospital facilities. Transportation is one of the great problems with rural people. More younger women are working and these have traditionally help with the neighbors and relatives. We have operated since May 1, 1974 a transportation system for Monroe County consisting of two 12-passenger buses which serve each area of the county twice a month. This was originated by the members of the American Association of Retired Persons, and the Monroe Mobile, Inc. now operates this vital support system. It needs to be expanded also, but funds for rural transportation are of low priority.

Because our state Home for the Aged, the Andrew S. Rowan Home, is within Monroe County, our two doctors are now giving those 250 persons services 5 afternoons a week, with medical service available on a 24 hour call. The home formerly was receiving services 2 days each week, with no "on call" support. They now have residents with pacemakers, on chemo-therapy and a physical therapist will shortly be obtained. They are at present using Lawrence Frankel's exercise programs for the elderly, to help them maintain themselves in good physical condition.

Our county has received the services of a psychiatrist, who comes for two days each month. The Mental Health Center is now serving about 300 patients, and has been able to terminate some cases which have brought the patient into being able to function ably in his or her situation. A psychologist and several social workers and aides enable the center to have a number of group therapy experiences as well as individual counseling. This center also serves the Andrew S. Rowan Home. They help support the Monroe Mobile and receive the use of one bus one day each week for their purposes.

Across the nation the ratio of population to doctors seems to be 650-850. In West Virginia ours is 1100. A recent survey of the active doctors has produced evidence of the great disparity in distribution of medical service. Of the 1822 doctors responding to the survey 1498 are full-time physicians, the others being in research, teaching or in administrative positions. Those practicing part-time were 261 doctors. These include those who practiced less than 26 weeks per year or less than 25 hours per week or less than 50 percent of their time in patient care. Sixty three aren't practicing.

Of the 1822 doctors, 48.1% or 877 are specialists and 47.7% or 870 are in primary care which includes general practice, family practice, emergency medicine, internal medicine, obstetrics, pediatrics, gynecology and occupational medicine. Twelve doctors, or 0.7% are in public health.

The data also shows that 94% of the doctors are males, 82.4% are white, 0.3% are black and 16.8% are Asian. Of this last group 83% are citizens of the U.S. and 16.9 retain their citizenship in their native land.

By age group, 17.5% are between 26 and 34, 26.9% are between 35 and 44, 22.7% are between 45 and 54 and 19.6% are between 55 and 64. Those 65 or older are 13.2%.

In West Virginia, of 55 counties, 2 have no doctor at all. Clay County with 9400 and Doddridge with 6600. These are human beings who are of low income and lack of transportation to get to medical facilities. Putnam county has 3 doctors to serve its 30,100 persons, or a 10,033 ratio of persons to doctor. Wayne, with 4 doctors to serve 38,200 is also as severe a situation with a 9550 ratio. Three counties have one doctor to serve about 4400 persons - Brooke, Hardy and Wirt. Eight counties have ratios in the 3000's, 10 counties in the 2000's and 18 counties in the 1000's, 2 counties have ratios in the high 900's and 4 in the high 800's, all over the national level.

Only three counties have <sup>adequate</sup>ade doctor to patient ratios, with three others reflecting a University teaching situation. Of our state population of 1,791,000 persons only 561,400 have adequate access to medical expertise, the remaining 1,229,600 have inadequate doctors to serve them with 84,300 of that number having no or such high ratios of people to doctors as to be almost without services.

I agree with the statement of Dr. Merlin K. Duval, Assistant Secretary of Health, Department of HEW to the Association of American Medical Colleges in November, 1972. "Medical schools have received \$1,083,740,000 since direct federal aid to medical education began in 1964. There is now reason to believe that the quid pro quo is at hand, and the academic health center may find that it is increasingly obliged to give up part of its traditional independence and accept those responsibilities which society, in turn, may place upon it."

I hope the time is soon that the United States will make a firm commitment that good medical care is each citizen's right and follow through with more creative and flexible programs of exposing medical students of post-graduate levels to all types of services, rural being of high priority. I hope also



that financial support will be given to doctors who elect to serve rural people. I hope that strong support systems within the medical structures and in the community will be established and funded so that doctors and other medical personnel can be freed of financial worry to minister to their patients. Transportation is crucial here, as are para-professionals and various levels of skilled nursing and facilities.

I have served and lived in larger communities and areas all my life. Until one lives in a rural community and experiences the many frustrations and difficulties of the rural people, particularly the elderly, in obtaining what is so easily available in larger cities, one cannot appreciate the value of comprehensive services in the medical area, and support systems to make these services available to all. Yet the rural community has its own attractiveness. As rural people are enabled to become trained they will return to the rural settings. As urban people are given choices and exposure to rural life, many will choose it over urban style of serving, though it will always be less rewarding financially.

Thank you for the privilege of putting the needs of our state and Monroe County people before you, with the 3 year experience of our small but highly effective county health center. We would invite you to come to West Virginia to see the situation made difficult by the mountains, meet the fine mountain people, and come to a deeper appreciation of the opportunity your committee has to make better medical services available to an expanding portion of our country - the rural communities.

Respectfully submitted,

*Beatrice R. Burgess*

Beatrice R. Burgess  
Church and Community worker  
Monroe County, W. Va., 24983

## WEST VIRGINIA RATIO: DOCTORS TO POPULATION

|            | Population | % of Total | Active M.D.'s | % Total | Ratio:<br>Pop./1 Dr. |
|------------|------------|------------|---------------|---------|----------------------|
| Total      | 1,791,000  | 100.0      | 1827          | 100.0   | 980                  |
| Barbour    | 15,300     | 0.9        | 18            | 1.0     | 850                  |
| Berkeley   | 40,200     | 2.2        | 45            | 2.5     | 893                  |
| Boone      | 27,300     | 1.5        | 10            | 0.5     | 2730                 |
| Braxton    | 13,200     | 0.7        | 4             | 0.2     | 3300                 |
| Brooke     | 30,200     | 1.7        | 7             | 0.4     | 4314                 |
| Cabell     | 105,700    | 5.9        | 157           | 8.6     | 673                  |
| Calhoun    | 7,400      | 0.4        | 5             | 0.3     | 1480                 |
| Clay       | 9,400      | 0.5        | 0             | 0.0     | -                    |
| Doddridge  | 6,600      | 0.4        | 0             | 0.0     | -                    |
| Fayette    | 52,500     | 2.9        | 29            | 1.6     | 1810                 |
| Gilmer     | 8,000      | 0.4        | 3             | 0.2     | 2667                 |
| Grant      | 8,900      | 0.5        | 9             | 0.5     | 989                  |
| Greenbrier | 32,900     | 1.8        | 32            | 1.8     | 1028                 |
| Hampshire  | 13,600     | 0.7        | 4             | 0.2     | 3250                 |
| Hancock    | 40,400     | 2.3        | 46            | 2.5     | 878                  |
| Hardy      | 9,100      | 0.5        | 2             | 0.1     | 4550                 |
| Harrison   | 74,800     | 4.2        | 70            | 3.8     | 1069                 |
| Jackson    | 21,900     | 1.2        | 10            | 0.5     | 2190                 |
| Jefferson  | 23,800     | 1.3        | 15            | 0.8     | 1587                 |
| Kanawha    | 223,700    | 12.5       | 339           | 18.6    | 660                  |
| Lewis      | 17,700     | 1.0        | 9             | 0.5     | 1967                 |
| Lincoln    | 20,100     | 1.1        | 6             | 0.3     | 3350                 |
| Logan      | 46,100     | 2.6        | 31            | 1.7     | 1487                 |
| McDowell   | 50,700     | 2.8        | 27            | 1.5     | 1856                 |
| Marion     | 63,600     | 3.6        | 45            | 2.5     | 1413                 |
| Marshall   | 30,500     | 2.1        | 34            | 1.9     | 1132                 |
| Mason      | 25,800     | 1.4        | 14            | 0.8     | 1843                 |
| Mercer     | 65,900     | 3.7        | 76            | 4.2     | 867                  |
| Mineral    | 2,500      | 0.1        | 10            | 0.5     | 2500                 |
| Mingo      | 33,500     | 1.9        | 17            | 0.9     | 1971                 |
| Monongalia | 68,800     | 3.8        | 245           | 13.4    | 281                  |
| Monroe     | 11,500     | 0.6        | 7             | 0.4     | 1643                 |
| Morgan     | 8,500      | 0.5        | 6             | 0.3     | 1417                 |
| Nicholas   | 24,000     | 1.3        | 14            | 0.8     | 1714                 |
| Ohio       | 61,900     | 3.5        | 153           | 8.4     | 404                  |
| Pendleton  | 7,400      | 0.4        | 3             | 0.2     | 2467                 |
| Pleasants  | 7,000      | 0.4        | 2             | 0.1     | 3800                 |
| Pocahontas | 8,500      | 0.5        | 3             | 0.2     | 2833                 |
| Preston    | 26,700     | 1.5        | 10            | 0.5     | 2670                 |
| Putnam     | 30,100     | 1.7        | 3             | 0.2     | 10,033               |
| Raleigh    | 75,500     | 4.2        | 96            | 5.3     | 786                  |
| Randolph   | 25,900     | 1.4        | 45            | 2.5     | 576                  |
| Ritchie    | 10,500     | 0.6        | 3             | 0.2     | 3433                 |
| Roane      | 14,800     | 0.8        | 10            | 0.5     | 1480                 |
| Solmers    | 13,500     | 0.8        | 11            | 0.6     | 1227                 |
| Taylor     | 15,000     | 0.8        | 5             | 0.3     | 3000                 |
| Tucker     | 7,400      | 0.4        | 2             | 0.1     | 3700                 |
| Tyler      | 5,800      | 0.3        | 3             | 0.2     | 3267                 |
| Upshur     | 21,100     | 1.2        | 9             | 0.5     | 2344                 |
| Wayne      | 38,800     | 2.1        | 4             | 0.2     | 9550                 |
| Weber      | 10,100     | 0.6        | 6             | 0.3     | 1683                 |
| Wetzel     | 20,900     | 1.2        | 10            | 0.5     | 2080                 |
| Wirt       | 4,400      | 0.2        | 1             | 0.1     | 4400                 |
| Wood       | 28,500     | 1.6        | 9             | 0.5     | 949                  |
| Wyoming    | 38,200     | 2.1        | 11            | 0.6     | 2927                 |

State Estimate to nearest 1000, county to nearest 100. Series -26, No. 121  
 U. S. Dept. of Commerce, Bureau of Census. June, 1975, "Current Pop. Reports"

STATISTICS ON MONROE COUNTY  
West Virginia, 1970

From the Bureau of Census, the Comprehensive Plan for Monroe County and information from the transportation survey conducted in 1973 by 72 volunteers of the county to the older adults of their area.

| Age Group        | Population by Age |         |        |         |        |         |  |  |
|------------------|-------------------|---------|--------|---------|--------|---------|--|--|
|                  | 1950              |         | 1960   |         | 1970   |         |  |  |
|                  | Number            | Percent | Number | Percent | Number | Percent |  |  |
| 0 - 4            | 1432              | 10.9    | 1035   | 8.9     | 788    | 7.0     |  |  |
| 5 - 9            | 1390              | 10.6    | 1117   | 9.6     | 932    | 8.3     |  |  |
| 10-14            | 1302              | 9.9     | 1287   | 11.1    | 1010   | 9.0     |  |  |
| 15-19            | 1075              | 8.2     | 1044   | 9.0     | 933    | 8.3     |  |  |
| 20-24            | 911               | 6.9     | 529    | 4.6     | 804    | 7.1     |  |  |
| 25-29            | 872               | 6.7     | 518    | 4.4     | 719    | 6.4     |  |  |
| 30-34            | 822               | 6.3     | 622    | 5.4     | 588    | 5.2     |  |  |
| 35-39            | 798               | 6.1     | 702    | 6.1     | 557    | 4.9     |  |  |
| 40-44            | 721               | 5.5     | 728    | 6.3     | 634    | 5.6     |  |  |
| 45-49            | 638               | 4.9     | 697    | 6.1     | 703    | 6.2     |  |  |
| 50-54            | 607               | 4.6     | 631    | 5.4     | 711    | 6.3     |  |  |
| 55-59            | 556               | 4.2     | 561    | 4.8     | 658    | 5.8     |  |  |
| 60-64            | 517               | 4.0     | 506    | 4.4     | 595    | 5.3     |  |  |
| 65-69            | 517               | 3.9     | 467    | 4.1     | 504    | 4.5     |  |  |
| 70-74            | 408               | 3.1     | 433    | 3.7     | 432    | 3.8     |  |  |
| 75+              | 557               | 4.2     | 707    | 6.1     | 704    | 6.3     |  |  |
| Total Population | 13,123            |         | 11,584 |         | 11,272 |         |  |  |

| Size of Labor Force - 1930-1970 |                |      |                        |         |
|---------------------------------|----------------|------|------------------------|---------|
| Year                            | Population     |      | Persons in Labor Force |         |
|                                 | 10-14 and over |      |                        | Percent |
| 1930                            | 9215           |      | 3932                   | 42.7    |
| 1940                            | 9768           |      | 4320                   | 44.2    |
| 1950                            | 9258           |      | 4228                   | 45.7    |
| 1960                            | 8367           |      | 3594                   | 43.0    |
| 1970                            | 8767           |      | 3132                   | 35.7    |
| <u>Men Only</u>                 |                |      |                        |         |
| 1930                            | 4751           |      | 3466                   | 73.0    |
| 1950                            | 4722           | 4732 | 4391                   | 73.9    |
| 1960                            | 4168           |      | 2764                   | 66.3    |
| 1970                            | 3929           |      | 2369                   | 64.3    |
| <u>Women Only</u>               |                |      |                        |         |
| 1930                            | 4464           |      | 466                    | 10.4    |
| 1940                            | 5036           |      | 639                    | 12.7    |
| 1950                            | 4536           |      | 737                    | 16.2    |
| 1960                            | 4199           |      | 830                    | 19.8    |
| 1970                            | 4838           |      | 1096                   | 23.9    |

Total Number of workers - 3046

Working in Monroe County- 1539

Working beyond county - 1358 (Covington and Clifton Forge, Va., Lewisburg area, Hinton area, Pearisburg and Narrows, Va., Princeton and Bluefield, W. Va.



## STATISTICS ON INCOME

| <u>Income of Families</u>           | <u>Monroe County</u> | <u>West Virginia</u> |
|-------------------------------------|----------------------|----------------------|
| Under \$1000                        | 6.4                  | 3.5                  |
| \$1000 - \$1999                     | 13.0                 | 6.8                  |
| \$2000 - \$2999                     | 10.7                 | 6.9                  |
| \$3000 - \$3999                     | 5.9                  | 7.7                  |
| \$4000 - \$4999                     | 8.5                  | 6.9                  |
| \$5000 - \$5999                     | 10.6                 | 7.2                  |
| \$6000 - \$6999                     | 9.7                  | 7.6                  |
| \$7000 - \$7999                     | 8.4                  | 8.3                  |
| \$8000 - \$8999                     | 5.2                  | 8.4                  |
| \$9000 - \$9999                     | 4.8                  | 7.0                  |
| \$10,000 - \$14,999                 | 12.0                 | 20.1                 |
| \$15,000 - \$24,999                 | 4.2                  | 7.8                  |
| \$25,000 and over                   | 0.7                  | 1.8                  |
|                                     | <u>Monroe County</u> |                      |
| Total Number of Families            | 2859                 |                      |
| Median Income of Families           | \$5516               |                      |
| Median Income Unrelated Individuals | \$1025               |                      |
| Median Income Families and Un. I's  | \$4592               |                      |
| Mean Income Families and U.I's      | \$5440               |                      |
| Per Capita Income of All Persons    | \$1726               |                      |

|   | <u>Monroe County<br/>Less than Poverty<br/>Level</u> | <u>Monroe County<br/>Less than 75% of<br/>Poverty Level</u> |
|---|--|---|
| Families  | 835  | 626   |
| Percent of Families                                 | 29.2   | 21.9  |
| Percent receiving public assistance                 | 19.9   |   |
| With related children under 18                      | 321  |   |
| With female head                                    | 118  | 109   |
| Unrelated Individuals                               | 425  | 365   |
| Percent of unrelated individuals                    | 68.1   | 58.5  |
| Mean Income - Unrelated I's                         | \$648  |   |
| Unrelated I's receiving public<br>assistance income | 17.2   |   |
| Persons   | 3368   | 2587  |
| Percent of all persons                              | 32.2   | 24.7  |
| Percent receiving Social Security                   | 22.9   |   |
| Percent 65 and older                                | 23.8   |   |
| Receiving Social Security                           | 73.1   |   |
| Related Individuals under 18                        | 1137   | 864   |
| Percent living with both<br>parents                 | 76.7   | 76.9  |

From approximately 300 responding to the transportation survey:

|                                      |              |                                 |
|--------------------------------------|--------------|---------------------------------|
| Number without a telephone - 97      | Destination: | Union 219 (Medical Center here) |
| Number of 1 member families - 115    |              | Gap Mills - 40                  |
| Number of 2 member families - 87     |              | Greenville - 29                 |
| How would you use transportation?    |              | Lindside - 33                   |
| Medical services - 267               |              | Alderson - 17                   |
| Groceries and supplies - 245         |              | Sweet Springs - 12              |
| Business -                           |              | Sinks Grove - 17                |
| Visiting Relatives and Friends - 115 |              | Others less than 10             |
| Work - 14                            |              |                                 |

Needs for transportation beyond the county -

Medical - 136; Groceries and Supplies - 91; Business - 58; Visiting - 42;  
Work - 13; Church - 2; Welfare - 1; Airport and Bus - 1 each; Dentist - 1.

Box 208  
 Union, W. Va., 24983  
 November 12, 1975

Senator Ted Kennedy  
 Health Manpower Sub-committee  
 Room 4230  
 Senate Office Building  
 Washington, D. C., 20510

Dear Senator Kennedy:

Rev. Richard Bowyer, of the West Virginia Committee for the Health Security Act has investigated the number of graduates of our medical school at West Virginia University and I include them below. In this short time he has not been able to discover which are in rural practice, so the figures indicate only within the state, and beyond it.

| <u>Year</u> | <u>W. Va.</u> | <u>non-W. Va.</u> |
|-------------|---------------|-------------------|
| 1962        | 4             | 11                |
| 1963        | 16            | 28                |
| 1964        | 13            | 27                |
| 1965        | 17            | 41                |
| 1966        | 17            | 40                |
| 1967        | 14            | 39                |
| 1968        | 12            | 47                |
| 1969        | 12            | 44                |
| 1970        | 22            | 37                |
| 1971        | 25            | 41                |
| 1972        | 23            | 45                |
| 1973        | 25            | 51                |
| 1974        | 30            | 46                |
| 1975        | 40            | 42                |

It appears your visit in 1971 did good. Come back again.

I shall seek to find further figures on the flow of doctors through the counties of West Virginia, and will send them to you when I get them.

Again, thank you for the privilege of presenting our needs before your committee. The experience was a deeply educational one for me, and helped me gain courage that this government is truly of and by and for the people, if we do our share of the work in helping to make decisions.

Sincerely,

*Beatrice R. Burgess*

Senator KENNEDY. Next we will hear from Rev. Guy Delaney, an old friend, who has been extremely active trying to do something about health care.

He is from the State of Arkansas.

I've enjoyed the opportunity of meeting with Reverend Delaney before and working with him on other health issues.

We are delighted to have you here.

Reverend DELANEY. Thank you, Senator Kennedy.

It is always good when we Protestants and Catholics work together to help human needs.

I will keep my comments brief.

I am Guy Delaney. I am a Presbyterian minister and chairman of the Arkansas Committee for National Health Insurance. For 5 years I have been closely associated with the critical need of Arkansas people to have access to quality health care at a price they can afford.

Many things block this access for a fourth of the State's population who get less than one-half of the health care they need. Apart from cost, the shortage and maldistribution of health manpower are clearly the most severe problems Arkansas people face when they need care.

Only three States in the Union have a greater shortage of doctors than Arkansas. If the University of Arkansas Medical School—the only medical school in Arkansas—could graduate twice as many doctors as they graduated in 1973, it would still take Arkansas 30 years to reach the national average doctor-patient ratio. A 1972 inventory of registered nurses conducted by the American Nurses' Association shows Arkansas with half as many registered nurses as the national average, giving Arkansas the distinction of having the most severe shortage of registered nurses of any State in the Nation.

But shortage is only the tip of the health manpower iceberg in Arkansas. Even more severe than shortage is maldistribution. Arkansas has 75 counties. Forty percent of the State's 1974 physicians reside in one county leaving much of the rest of the State medically neglected. The problem is brought clearly into focus by the fact that over half of the State's counties have been designated by the Department of Health, Education, and Welfare as being critically deficient in medical manpower. Twenty-five counties in Arkansas have five or fewer physicians.

The situation is the same with dentists. A 1974 Health Service Corps survey identified over one-third of the State's counties as being acutely short in dental manpower. And as the physicians and dentists go, so go the registered nurses and other related health manpower.

And, of course, there are other factors pertinent to the maldistribution of manpower—maldistribution of physicians by age and maldistribution of physicians by specialty. While the average age of physicians in the State is 47.1 years, 27.3 percent are over 55 years of age and can be expected to retire or significantly reduce their practice within the next 10 years.



Since physicians in rural areas tend to be older than their counterparts in urban areas, there seems to be a problem of grave proportions developing if nothing is done to induce more physicians to practice in rural and underserved areas of the State. There are 16 rural counties in Arkansas—counties with under 10,000 population. Only 1 percent of the doctors who graduated from the University of Arkansas Medical School between 1960 and 1967 set up practice in these rural counties.

Arkansas has a markedly different specialty distribution than the United States as a whole. We are fortunate to have a higher percentage of our doctors in general practice than the national average. Yet the distribution of specialists and those in general practice is very much a problem. The people still have very little choice since the specialists tend to end up in the urban areas and those in general practice in the rural and underserved areas. Of the 795 physicians in Pulaski County, 368 are board certified, but of the 368 who are certified, only 9 are certified by the American Board of Family Practice.

The shortage and maldistribution of medical manpower is a very complex problem which cannot be solved simply by expansion of medical schools. We have tried that. The problem has been known for five decades, and in spite of many attempts at a great cost to taxpayers no improvement has been achieved. In fact, we are worse off than we were 50 years ago.

A great deal of legislation has addressed this problem. None of our medical programs have been underfinanced, yet for all of our time and money, the desired result has not been achieved.

What we need now, really, is some legislation that addresses the whole question of finding ways to distribute doctors more equitably among our population.

I think I and the Arkansas Committee on Public Health Insurance would favor strongly a requirement that all graduates of medical and dental schools would serve 2 years in an underprivileged area and those students who choose to receive financial assistance from some fellowship program, we would favor that they serve a period of 4 years with no buyout possibilities.

We think a doctor makes so much money now that they can buy their way out of anything they want to. We would like to close that loophole.

Senator KENNEDY. You might get one vote in the Senate. That would be mine. [Laughter.]

But I am glad I am in good company.

Reverend DELANEY. We think when this happens that the American public, and especially the people of Arkansas will more nearly get the care they need at a price they can afford.

Senator KENNEDY. I appreciate your comments. Much of the testimony of this panel is related to general health issues. You know we have been involved in a debate on health insurance. But historically there has been a reluctance to consider health insurance because we do not have the manpower, the facilities, whatever, in the rural areas and inner cities. So people argue we cannot go pass health insurance.

But when we go the other way, and try and build up the kind of infrastructure in a responsible and coordinated way, try to do something about getting health manpower and services and facilities out into these areas, then we run into the problem of financing.

So, it is really a double-headed coin.

The point is to try and tie these things together. That is what I have been trying to do for a period of time. This tie-in is really implicit not only in your testimony, but in much of the other testimony this morning.

That is important.

I am hopeful that our groups here—I know you are here to testify just on this legislation—but that you will let your views be known to your Senators about the importance of the broader issues?

I hope they can hear from you about the importance of this particular issue. The approach we are taking now, I think, with the administration's cooperation; and working with the members of this committee, makes a meaningful contribution.

It is not going to do all the things that we would like to do. But it can be, I think, a most important health person power—I have to get away from manpower, I was using that term the other day and was quickly corrected to person power—program's it can be enormously meaningful. I think we have got some very substantial agreement on the approach we are taking.

I hope you will let your Senators know about your views.

[The prepared statement of Reverend Delaney follows:]



ARKANSAS  
COMMITTEE  
FOR NATIONAL  
HEALTH INSURANCE

TESTIMONY OF

W. GUY DELANEY

ON

THE HEALTH MANPOWER ACT OF 1975

BEFORE THE

SENATE HEALTH SUBCOMMITTEE

IN BEHALF OF

THE ARKANSAS COMMITTEE  
FOR NATIONAL HEALTH INSURANCE

WASHINGTON, D.C.  
OCTOBER 29, 1975



## TESTIMONY

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But shortage is only the tip of the health manpower iceberg in Arkansas. Even more severe than shortage is maldistribution. Arkansas has seventy-five counties. Forty percent of the state's 1974 physicians reside in one county leaving much of the rest of the state medically neglected. The problem is brought clearly into focus by the fact that over half of the state's counties have been designated by the Department of Health, Education and Welfare as being critically deficient in medical manpower. Twenty-five counties in Arkansas have five or fewer physicians.

The situation is the same with dentists. A 1974 Health Service Corps survey identified over one-third of the state's counties as being acutely short in dental manpower. And as the physicians and dentists go, so go the registered nurses and other related health manpower.

And of course there are other factors pertinent to the maldistribution of manpower - maldistribution of physicians by age and maldistribution of physicians by specialty. While the average age of physicians in the state is 47.1 years, 27.3 percent are over 55 years of age and can be expected to retire or significantly reduce their practice within the next ten years. Since physicians in rural areas tend to be older than their counterparts in urban areas, there seems to be a problem of grave proportions developing if nothing is done to induce more physicians to practice in rural and underserved areas of the state. There are sixteen rural counties in Arkansas - counties with under 10,000 population. Only one percent of the doctors who graduated from the University of Arkansas Medical School between 1960 and 1965 set up practice in these rural counties.

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The shortage and maldistribution of medical manpower is a very complex problem which cannot be solved simply by expansion of medical schools. We have tried that. The problem has been known for five decades, and in spite of many attempts at a great cost to taxpayers, no improvement has been achieved. In fact, we are worse off than we were fifty years ago.

A great deal of legislation has addressed this problem. None of our medical programs have been underfinanced, yet for all of our time and money, the desired result has not been achieved.

When we recognize that almost one-third of the 94,000 medical and dental students who graduated between 1965 and 1972 received government loans to finance their education, and that as of October 1973 only eighty-six physicians and one hundred thirty-three dentists had obtained cancellation of a portion of these loans for practicing in a designated shortage area, we quickly see that loan cancellation for hardship area service does not work.

Since Federal funds now account for approximately half of the revenue of medical schools, it seems only reasonable that more accountability would be expected of both doctors and medical schools.

The Arkansas Committee For National Health Insurance strongly favors the Health Manpower Act of 1975. Passage of this Act can help create the conditions under which the problems of geographic and specialty maldistribution, heavy reliance on foreign medical graduates, and the existence of inconsistent and inequitable state licensure laws can be effectively met. When this happens, the American public and especially the people of Arkansas will more nearly get the care they need at a price they can afford.



Senator KENNEDY. Our final witness this morning is Mr. Kortepeter. Will you proceed?

We will include your statement in the record in its entirety at the conclusion of your testimony.

Mr. KORTEPETER. Thank you.

I will summarize probably quite briefly.

First of all, I would like to give you what I might call a brief overview of where I am philosophically on some of this health manpower legislation.

Following that, just briefly, a critique of a very few things that I understand the committee is considering at the present time.

No. 1, if you subscribe to the philosophy that we have a shortfall of physicians, than I think it must be said with some certainty, particularly in view of the fact that we are going to perhaps limit FMG's, must be said with some certainty that we must continue to support the concept of capitation. I think that support of medical school output is to be about the same level which they have been able to achieve in the past few years; I think funding of that capitation is going to be roughly at the present or not much less than the present level of funding.

Second, on the issue of maldistribution, I think that you have to be a realist when you consider what can be done in the way of attacking the maldistribution problem.

I personally subscribe to the philosophy that the only way that this problem can be attacked perhaps at this moment in time is by the scholarship program for the National Health Service Corps.

Once again, with respect to capitation, there's been some effort to tie scholarship and capitation together. There has also been some efforts to attach strings, you might say, to capitation, and impose certain conditions on medical schools who are to qualify for capitation.

Just as a bold philosophical statement, I think I would have to say I do not favor attaching strings to the capitation process.

Now, it may be necessary that this be done. But I think as a philosophical statement, I would have to say I oppose that.

I do not think that we should interfere in the medical school educational process in order to attack a social concern.

I think we have done that in other fields in this country, trying to use educational process as perhaps a vehicle and I am not sure that is the way to get the job done, and unless we are going to adversely affect the educational process itself, in other words, the end product of what we are trying to turn out.

Senator KENNEDY. But was it all right to do it with regard to expanding medical school classes?

Mr. KORTEPETER. Yes, I concur in that.

Senator KENNEDY. You mean your philosophical position is, it is OK to put a condition on it in order to expand the medical schools as we did in 1971, but it is not philosophical to put it on, to make sure that we get or train the right type of medical school?

Mr. KORTEPETER. In a moment I will touch on one issue that I understand is under consideration.

Senator KENNEDY. I am just trying to understand your philosophy. It is all right to put the condition on medical schools to expand classes, but it is not all right to make sure that those who come out of the classes meet the needs of the country.

Mr. KORTEPETER. I am only concerned about the type of conditions that might be imposed as a condition before qualifying for capitation.

Senator KENNEDY. We are following exactly the pattern we established in 1971.

We put a condition on then, you had to expand in order to get capitation.

Now we are trying to add a condition that the people who are trained are going to be the kind of people that we need in the country.

I do not understand the basic kind of philosophical reservation you have. You are willing to put conditions on capitation with respect to increasing numbers, but not to provide the kind of distribution to meet national needs.

I may be missing the point.

Mr. KORTEPETER. I think perhaps you are misinterpreting my remarks, Senator Kennedy.

I am only concerned that as few conditions be imposed as part of capitation grants as is necessary to meet maldistribution problems.

Let me pass to another thought.

I concur in the thought that there needs to be a reorganization and redistribution of postgraduate residencies with strong emphasis on the primary care fields.

I do believe that the medical schools have the responsibility and can be cooperative in this, but I do also believe that they are not the sole party that is concerned with the establishment of the residencies and attention must be given another source, namely, the hospitals, in order that this balance that we need can be achieved.

There is a need for a uniform system of licensure and board certification.

Now, I do not favor legislation that would mandate this, but I do think that legislation could be passed which would authorize a study in this field.

The question came up awhile ago whether this should be tacked onto the health manpower bill, and I certainly would not want it on at the risk of losing the health manpower bill, but it seems to me it is an area that needs attention.

I favor the program for inducing existing doctors to retrain and relocate, some sort of incentive system.

From what I have been able to learn, there are lots of doctors who, given the opportunity and proper incentive, might relocate into these underserved areas.

I do not remember seeing anything specifically in the pending legislation that might address itself to that issue.



Senator KENNEDY. Are there people that would be willing to do that, doctors that would be willing to do that?

Mr. KORTEPETER. That may be a hopeless dream. I think there probably are.

I think one factor that might be an inducement to this is the high cost of malpractice insurance for certain types of specialties.

Senator KENNEDY. I think it is worthwhile to give it some thought.

As one who was the author of the teacher corps bill to try and get teachers during their sabbatical year to teach in underserved areas, and that has met with some success. And also new teachers. But with regard to older teachers, we have had some success in getting older teachers to go into a school area that was particularly hard-pressed.

It may very well work out with doctors. I think it is worthwhile trying.

If you have got some ideas about what would be an incentive, I think it is something that we ought to consider.

Can they go in the action corps?

I do not know, but we ought to find out.

We will find out more about it.

If you have any specific ideas, please send them to us.

Mr. KORTEPETER. As has already been stated, and I would like to reiterate, I favor a much higher profile for physician assistants, what is commonly referred to as paramedics.

I think particularly in some of the rural sections and some of the inner-city sections which are underserved they can perform most useful functions and can relieve the loads on an overworked physician.

Finally, as part of my overview statement, I do subscribe and agree that so-called FMG's must be brought up to American standards for certification.

I think we should not continue to serve as brain drains for countries or as needs—or I think as long as we can be helpful in training these people from other countries we should do so.

Once we have ascertained that they are in a specialty from which the country from which they come needs them, then I think it would be our responsibility to encourage them to return to their own country.

Let me turn briefly—I hope I am not taking too much time——

Senator KENNEDY. We have a few minutes remaining.

Mr. KORTEPETER. I think that is about all that will be necessary.

No. 1, I think that the schools today, in view of the late hour of adopting manpower legislation, need to have some assurance that at least their budgets for the remainder of this year will be funded, if not altogether as much as in the past, at least partially with capitation grant.

So I would recommend as an initial program that the Health Manpower Act of 1971 at least be continued for fiscal year 1976.

Now, the proposed level of capitation has been wavering between a figure as low as perhaps \$1,000 and a figure of over \$2,000.



I understand that the present level of funding of capitation grants is in the range of \$1,500, which I understand is the administration proposal.

I believe from what I have been able to learn from medical schools that they are pretty much working at capacity in order to turn out the number of graduates they are turning out and that the figure of \$1,500, if attainable and feasible within budget limitations, would be a more practical figure.

The question of whether or not further capitation grants should be tied to an increase in enrollment, I have a question.

If it can be done, then it should be done.

But I think if it is to be done, if the capitation grant is to be tied to an increase in enrollment, I think that the increase in enrollment should be a modest amount simply because I have the feeling that the medical schools are at least putting their shoulder to the wheel in order to try to achieve maximum turnout at this time.

There has been some discussion as to what percentage level the scholarship program should be set, whether at a 25-percent level, or at a 50-percent level.

I think the point here is that, at least to me, this particular scholarship program has always been oversubscribed.

I personally have confidence in the social conscience, the social awareness of the young people today that are not only coming into medical school but into other schools, and feel confident that whatever level of scholarship can be funded will be subscribed.

The issue came up earlier this morning as to whether or not the medical school should be mandated by a certain fiscal year to achieve certain levels of residencies in the primary care field.

I think that for some that might provide some difficulty, from what I have been able to ascertain.

I think that, foremost, whatever level is set could probably be attained as long as we are talking in terms of affiliated residencies, in other words, those residencies over which medical schools do have some control.

Now, one of the other proposals for capitation funding, or condition for capitation funding, was the provision within the medical school curriculum of a family-care teaching unit, or at least a unit that could be identified as such.

It is my understanding then from available statistics that approximately 80-some out of approximately 114 medical schools have already achieved this level, and this may in itself be somewhat academic.

We certainly support the view that the disadvantaged student should have certain scholarship aid made available to enable him to participate in medical training. There has been a suggestion that a ceiling should be put on approved residencies for purposes of Federal funding.

I suppose there the issue is what the ceiling will be and in what areas the residencies will be imposed.

I think that is probably an issue which addresses itself more to the hospitals than it does to the medical schools concerned.

Senator KENNEDY. Let me just ask you a question.

On licensure, would you be for or against uniform licensure?

Mr. KORTEPETER. I am for a uniform licensure system.

Being a professional myself, I see these problems from State to State. So long as we can attain or adopt a level of achievement, which those being licensed must measure up to, then I think a uniform system of licensure is preferable.

I believe that concludes everything that I wished to discuss, Senator.

Senator KENNEDY. I think that is very helpful.

I want to thank all of you very much for your appearance here this morning.

As I mentioned to you, I hope that you will take time to talk with your Senators and let them know that you were here, and this is a matter of importance. Mention to them that you are following this closely.

I do think we have got a real opportunity to make a very substantial impact in this whole area.

I think it is a matter of real consequence.

The administration has made a major step forward in trying to accommodate some of these views, and we have been working very closely with them and other members of the committee.

I am very hopeful that we can pass something of substance and meaning.

We will be hearing from other groups about this proposal. There will be those, I am sure, the deans of medical schools, and the AMA and other groups that will be on the phone night and day to members of this committee on this. We find that we do very well in terms of reform until about an hour or two before the vote.

The testimony this morning from your group shows a good deal of thought.

I just hope that you will continue to keep the heat on us up here.

We are going to consider your suggestions very seriously.

I want to thank all of you for coming.

I would like to ask Reverend Delaney, will the doctors down in Arkansas treat you with that view you have?

Reverend DELANEY. There are 35 doctors in the church that I serve in Little Rock. We are on better terms than you might imagine.

I take all of my treatment in Little Rock at this point, anyway.

[Laughter.]

Senator KENNEDY. Well, that is good.

Thank you very much.

[The prepared statement and biography of Mr. Kortepeter follows:]



PREPARED TESTIMONY OF  
PAUL F. KORTEPETER AS A WITNESS  
INVITED TO TESTIFY BEFORE THE SENATE  
HEALTH SUBCOMMITTEE AT ITS HEARINGS  
ON HEALTH MANPOWER ON OCTOBER 29, 1975

Mr. Chairman, and members of the Senate Health Subcommittee, I wish to thank you for this opportunity to participate in your hearings on this significant pending legislation on health manpower.

I am here as a Presbyterian layman and Elder, and, while I am a member of the United Presbyterian Church in the United States of America, my views are my own and are not intended to represent an official view or position of that organization or of any other organization or entity. Moreover, I believe the UPCUSA is already on record before this Subcommittee with its own official opinion as to this, and perhaps other, pending health-related legislation.

First, I should like to give you my brief overview of the pending health manpower legislation. Following that, and if time permits, perhaps I can give you a few specific thoughts which have occurred to me on this subject.



I.  
Overview

A. Existing legislation should be continued for fiscal year 1975 either at current funding levels, or at not less than 50 percent of those funding levels, to provide a transitional period into new legislation designed to deal more specifically with the maldistribution problem.

B. If the current output of MOD graduates is to be maintained, capitation should be continued in future fiscal years.

C. Very likely, future capitation levels will have to be reduced, but, if so, it should be accomplished by a reduced step process.

D. I favor the proposal that would not tie any strings to 50 percent of capitation if present enrollment is maintained or bettered. As to the other 50 percent, I would favor the option selection program, proposed in S. 992.

E. I endorse a scholarship program through the National Health Service Corps, which would require one year of service for each year of scholarship. With a

generous scholarship program, I am not convinced of the necessity for any buy-out provision.

F. Since I believe a generous service-related scholarship program will begin in due time to solve the maldistribution problem, I do not believe that MOD schools should be mandated to set aside any particular percentage of their enrollment slots or facilities for participants in a scholarship service program.

G. I agree that part of the maldistribution problem is related to the residency structure. I am not convinced that medical schools, per se, can or should be mandated to change the residency structure. They can be persuasive and cooperative. But the root of the problem is in the hospitals themselves. Therefore, I favor legislation designed to encourage--or, if necessary--mandate hospitals to effect the change of residencies needed to meet the maldistribution crisis.

H. I favor a requirement for capitation that would require medical schools to establish family care teaching units. Inasmuch as many have already done so, however, this may be academic.

I. Since I am convinced that many medical specialists might shift to family practice from less satisfying and rewarding specialties--certainly the cost of malpractice insurance might be an additional incentive--consideration should be given to a scholarship program in exchange for service which would be designed to re-train or refresh their skills in the primary care field.

J. As to FMG's, I favor those proposals designed to tighten up licensure, and if possible, to encourage them to return to the countries of their origin, if those countries are in significant need of the type of medical service they have been trained to perform. This must be done in a delicate manner, however, so that it cannot be inferred from the action taken that we are really trying to raise a protective shield for our own personnel.

K. While I do not favor legislation respecting licensure and certification, I feel there is a great need for a uniform system of licensure and certification. This, it seems to me, can best be accomplished by commissioning a study group from the public, private and educational sectors which should come up with recommenda-



tions for legislation.

## II. Statement

Generally speaking, the previous legislation in the health manpower field has been oriented towards increasing the number of medical school graduates and, thereby, alleviating, or helping to alleviate, the acknowledged shortage of medical services in various remote and inter-city urban areas of our country. In the main, this was accomplished by providing funds to medical schools with which to expand staff and facilities. While this initial goal has been achieved in large part--the number of medical schools has increased from 86 in 1961 to 114 in 1973 and 1974, and enrollment has increased from 35,833 in 1968 to 53,554 in 1974--the maldistribution of medical services remains as a growing concern. Principally, then, we must concern ourselves with the means for correcting the maldistribution of medical services. Further refined, the issue is, how do you motivate that number of medical graduates necessary to provide the services which are needed and to provide them in those

geographical areas where the need exists? Several alternatives suggest themselves:

1. Mandatory service;
2. Mandatory service determined by lot;
3. Freedom of choice encouraged by economic incentive;
4. Voluntarism through an appeal to the social conscience; or
5. Continued medical school expansionism until supply satisfies the demand.

My personal conviction is that the first alternative is not politically or possibly even constitutionally acceptable. The second alternative may be acceptable, but is somewhat in doubt because of the abolition of military conscription. The third alternative, while not without its inequities (e.g., it favors the more affluent, at the expense of the less affluent, student) probably represents the best available alternative. Presumably, a strong appeal to social conscience (the fourth alternative), would, simply not work absent economic incentives. Finally, I am not at all uncertain in

my own mind that the fifth alternative might not be the best overall, if our society had the time to await the effects of the law of supply and demand, particularly, in view of the fact that there appears to be statistical evidence already available which indicates a reversal of the previous trend to specialized medical practice and a reversion to community family-oriented practice. For example, it is reported that 20 percent of the 1974 graduating class nationally opted for family practice training.

Having stated that probably the best available alternative to providing medical services to these communities in need requires freedom of choice with economic incentives, let us now examine the incentives to be given and the instrumentalities through which they are to be provided.

Initially, I should like to say that most likely the concept of "capitation" as contained in the Comprehensive Health Manpower Training Act of 1971 will have to be retained for the near term, say three to five years, and at least at current levels of funding. I say this because it is evident to me that, if medical schools are to con-



tinue to turn out graduates even at the present rate-- the impact of inflation being what it is and has been-- they will continue to be in need of Federal funding. As to capitation, then, I do not favor any conditions being imposed or linked to either an increase in enrollment or as a means for resolving the maldistribution concern. To do so, in my opinion, can only result in an inferior quality of medical education. I say this because education usually suffers when it is used as the pawn or vehicle with which to try to cure some other social ill in our society.

If, however, capitation is to be linked to a solution of the social concern, then I favor each medical school having various options from which it can choose to help to orient its students to the types of practice and geographical areas of practice that will help to solve the social concern which exists. To mandate an across-the-board condition or conditions applicable equally to all medical schools generally, without consideration being given to their individual characteristics and opportunities for making different contributions to solving

the need crisis, would be indeed unfortunate.

As incentives, I favor a continued and expanded scholarship program under the auspices of the National Health Service Corps. Generally, this will include one year of service in the Corps for each year of medical or technical school paid for by scholarship funds. Continuation and expansion of this program seems to me to be only logical in view of the reports that available scholarships are constantly oversubscribed. Dovetailed with this incentive, much like as with the Armed Services, I favor reasonable bonuses for those who agree to continued service in the Corps following the termination of any obligatory or other extended term. As a part of this program, I endorse the private practice option, which would permit the individual concerned to select his or her own geographical and service area of practice, provided only that it was to be in the area known as "primary care" and in a geographical area where an evident need for service existed.

Not included in the proposals as to scholarships which I have seen should be one which would hold

out the opportunity for re-training to any existing technician who desired to shift from a more specialized field to one of primary care, provided he or she, too, was willing to give in return the necessary Corps service time.

Other incentives which might be considered for remote geographical areas of the country could include the following: fast tax write-offs for equipment and facilities, low interest or guaranteed loans for purchase of equipment and facilities and direct economic subsidies designed to guarantee those willing to go to remote areas an income level comparable to some mean level of income that could be attained in more desirable and less remote localities. I am particularly intrigued with the thought that appropriate incentives could be established to encourage group family practices which could literally "ride circuit" throughout a remote geographical region by use of mobile office and equipment units.

Having spoken briefly to the need for freedom of choice with economic incentives as the best means for attacking the maldistribution issue, let me now speak



briefly to two other matters of concern.

It is my understanding that HR. 5546 would preclude capitation for any medical school which did not obtain signed contracts from not less than 50 percent of its entering students whereby they would agree to repay the Federal government its per capita contribution to their medical education if they did not agree to service with the National Health Service Corps for a period of at least two years following graduation. This provision, it seems to me, would be self-defeating. Let me explain. Most entering students in medical school, as in most undergraduate and graduate schools, do not know, with any great degree of certainty, where they will go or with whom they will associate upon graduation. Therefore, why opt for repayment of money which substantively you've never individually borrowed? Why not keep your options open? If that should occur, many medical schools might be unable to obtain the prescribed number of contractual agreements and, hence, would lose Federal funding. Again, because of the crunch on budgets, it could be reasonably expected that a cutback would occur in staff and facilities

with a concomitant reduction in enrollment. On the other side of the coin, you would have other schools which would, of economic necessity, have to recruit only (or at least the mandated percentage of enrollees) who would agree contractually to the "capitation" repayment. This, to me, smacks of economic coercion and does not present a basis for which a viable and equitable admissions policy can or should be formulated by medical schools.

Another issue which is pending within the legislation which you are considering is that related to the extent to which capitation or a portion thereof should be tied to the medical school's abilities to cause a significant shift or restructuring in the number and type of post-graduate residencies. Most persons with whom I have spoken concur that a restructuring of residencies must occur if there is to be a significant shift from what may be characterized as secondary and tertiary specialties to those of primary care--i.e., family practice, generalist in internal medicine, generalist in pediatrics and generalist in obstetrics and gynecology. The emphasis in the existing proposals is to place this

burden upon the medical schools. The trouble with this emphasis is that it ignores the traditional relationship of the medical schools in the residency process. Traditionally, residencies are created by hospital medical staffs and hospital administrations to fit the needs of a particular hospital. While medical schools are influential in this process, they have no decision-making authority. Why not, then, go to the root of the problem and, by appropriate funding measures, encourage residency changes by the hospitals directly. In other words, encourage hospitals in need areas to establish residencies in the primary care fields. This will have the immediate effect of providing new opportunities for recent graduates and, very likely, in areas where, once they are established, they may, and hopefully will, elect to remain.

It is significant to note that, in my home state of Indiana, the State, in conjunction with the medical school and community hospitals in various regional cities, has been successful in increasing the number of residencies from 428 in three cities to 720 in eight cities in



little over six years--a 68 percent increase. This has had a very definite and salutary effect in inducing students to remain in the state and in the smaller communities in which they have had their residencies. This so-called "Indiana Plan for Statewide Medical Education" also has many other facets relevant to our discussion here today, and I would urge the Committee members to examine this plan in detail as a part of its legislative planning process.

As to the so-called FMG problem, my main concerns are twofold:

1. I am concerned as to the quality of service being performed by these medical technicians; and
2. As to the drain they represent from countries where even a greater need for medical services exists.

I would endorse that legislation which proposes to tighten up the licensure of FMG's and which, at the same time, once their training in post graduate work in this country was completed, would encourage them to return to their country of origin, particularly, in those cases

where the specialty in which they have been trained is one for which a great need in their country of origin exists.

Recent personal experience has convinced me that some significant portion of the under-served need crisis could well be met by utilization of a carefully trained staff of paramedicals (physician assistants). While provision has been made heretofore for encouragement of the establishment of this type of educational process, it occurs to me that much greater emphasis is warranted. I am confident that statistics are readily available which would indicate a great number of paramedical types who have already received extensive medical training while serving as corpsmen with the United States Army, Navy and Air Force. I would judge that many of these men and women, upon leaving service, probably went into other non-health-related employment. It certainly seems conceivable that they could be attracted back into the health care field and could be made readily available as physician assistants after some shorter period of re-training. Certainly, the potential which exists

from this source should be explored with care.

Finally, I would like to comment briefly on the need for consistency in planning as a part of the legislative process. Medical school budgets, like all large institutional budgets, are drawn as much as 18 to 24 months in advance. As a consequence, sudden shifts in legislative direction over a short period of time can have disastrous effects upon staff morale and program planning. So it is that if a change in conditions necessary for capitation is to be imposed in any significant degree from those which have existed in the past, a period of transition to provide for adequate time in program planning and staff shifting should be reasonably anticipated.

### III. Conclusion

In conclusion, I raise one word of caution. Often in these United States, when confronted with a problem of major social concern, we tend to overcorrect, i.e., we pump so many of our resources into a correction of the problem that we wind up with an excess or surplus



of resources devoted to the correctional measures. The result is waste and frustration. Therefore, as we endeavor to meet the maldistribution problem head-on, let us not, in so doing, lose sight of the goals already achieved, those that will be achieved because of forces set in motion and of the need to employ resources and manpower to continued improvements and innovations in medical technology.

Respectfully submitted,

/s/ Paul F. Kortepeter

Indianapolis, Indiana  
October 28, 1975

BIOGRAPHY OF PAUL F. KORTEPETER

Paul F. Kortepeter is a Presbyterian layman and an Elder in the Second Presbyterian Church in Indianapolis, Indiana. He is an attorney by profession and is a partner in the Indianapolis law firm of Kothe, Shotwell, Claycombe, Hendrickson & Kortepeter.

He is married to the former Marion L. Duncan of Durham, North Carolina, and they are parents of two children, Elizabeth, a sophomore at Ohio Wesleyan University, and Bill, a student at Northview Junior High School in Indianapolis.

Mr. Kortepeter received his AB degree in economics from Harvard College and his LLB degree from the Duke University School of Law. He has practiced law in Indianapolis since 1956. He is a member of the Indianapolis, Indiana State and American Bar Associations and is admitted to practice in the State of Indiana and the District of Columbia.

Among other civic and charitable activities, Mr. Kortepeter is a former Moderator of the Presbytery of Indianapolis and served as one of eleven members of the Commission on Reorganization of the General Assembly Agencies of the United Presbyterian Church in the USA in 1971-73. He serves as a Trustee of Long College for Women of Hanover College, a Presbyterian-related college in Hanover, Indiana.

Senator KENNEDY. The subcommittee stands in recess until tomorrow.

[Whereupon, at 12:45 p.m., the subcommittee was recessed, to reconvene Thursday, October 30, 1975, at 10 a.m.]

## HEALTH MANPOWER LEGISLATION, 1975

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### Views of Academic Medicine on Health Manpower

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THURSDAY, OCTOBER 30, 1975

U.S. SENATE,  
SUBCOMMITTEE ON HEALTH OF THE  
COMMITTEE ON LABOR AND PUBLIC WELFARE,  
*Washington, D.C.*

The subcommittee met at 10:10 a.m., in room 4232 Dirksen Senate Office Building, Senator Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy and Stafford.

Staff present: LeRoy G. Goldman, professional staff member, and Jay B. Cutler, minority counsel.

Senator KENNEDY. We will come to order.

Today, the Health Subcommittee resumes its hearings on the important health manpower legislation.

I was heartened yesterday by the testimony of organized labor which leads me to the conclusion that the probability of expeditious reporting of an effective health manpower bill is on the rise.

Today, the subcommittee has the opportunity to hear the views of a host of distinguished leaders from academic medicine.

I am extremely hopeful that their considered judgment will complement the excellence of yesterday's presentation.

Because of the large number of witnesses today, I do not intend to consume a great deal of time with opening remarks. In order to expedite today's hearing, I am going to impose the 10-minute rule and, therefore, request all witnesses to submit their statements for the official record and to summarize, if they will be good enough to do so.

I am confident that these distinguished deans know the subject well enough to be able to meet that challenge.

We are glad to welcome the dean of Harvard Medical School, Robert Ebert, as our first witness. He has been a great help to this committee over the past, been a warm personal friend and person relied on for a good deal of counsel and guidance in this matter as well as many other health issues.

We are delighted to have you here this morning.



**STATEMENT OF DR. ROBERT H. EBERT, PROFESSOR OF MEDICINE,  
AND DEAN, HARVARD MEDICAL SCHOOL**

Dr. EBERT. Thank you, Senator.

I wish to thank Senator Kennedy and members of the subcommittee for the privilege of testifying today.

It is evident that the health manpower legislative proposals before this committee are intended to do more than provide basic financial support for the Nation's medical schools, dental schools, and schools of osteopathy, important as that may be.

The legislation also addresses problems of geographic maldistribution, excessive reliance on foreign medical graduates, maldistribution among the specialties, and specifically manpower needs in the primary care specialties.

It is obvious to the members of the subcommittee that the scope of the proposed health manpower legislation is too limited to solve all the problems of our health care delivery system, but it may facilitate reform and revision. In the interest of time, I shall not try to comment on all the aspects of the legislative proposals before you but, rather, try to highlight those provisions which I think are of particular importance.

Increased enrollment: Many experts in the field of health manpower will tell you that recent increases in medical school enrollment are sufficient to meet the physician manpower needs of the Nation. It is their belief that the problem of shortages is related to maldistribution and to organization of health services rather than numbers. There is much to be said for this argument but, in my view, there are two other reasons for increasing medical school enrollment.

One: There are many well-qualified students who are denied admission to medical school simply because there are too few places. Some students who are rejected by American medical schools are able to enroll in foreign medical schools but, for the most part, the quality of education in these schools is inferior and clinical experience in particular is likely to be inadequate.

Two: Presently we rely heavily on the services of foreign medical graduates [FMG's]. About 40 percent of newly licensed physicians each year are FMG's and many of these physicians are marginally trained by U.S. standards. It is difficult to justify this reliance on FMG's at a time when well-qualified American students cannot gain admission to American medical schools.

Some schools have expanded so rapidly that there is danger of diminishing the quality of medical education in these schools if they are asked to expand further at this time. Possibly, those schools that could demonstrate that further expansion would create hardship for students and faculty might be provided with other alternatives.

For example, the medical school or university might initiate programs for physician assistants and nurse practitioners or expand existing programs in order to qualify for capitation.

I would also urge that legislation be written which emphasizes output rather than intake. If this were done, a school could increase its enrollment during the clinical years by admitting American students who had completed their preclinical studies in foreign medical schools.

Senator KENNEDY. Do I understand your position is that we do or do not need more?

Dr. EBERT. It is my position we need more.

Senator KENNEDY. But that we ought to have some kind of device in the legislation that does not require additional kinds of expansion in some medical schools?

Dr. EBERT. Some medical schools.

Senator KENNEDY. How are we going to do that?

Dr. EBERT. I think it would have to be demonstrated in each case that there simply are not enough facilities.

Senator KENNEDY. You would leave that to the Secretary?

Dr. EBERT. To the Secretary.

Senator KENNEDY. Do you spell out in the legislation some goals in terms of general ball park figures? I mean, you have to give some guidance.

Dr. EBERT. I think what I would suggest is that schools be asked to increase by 5 percent or 10, whichever is larger, and that schools would have to demonstrate that they really could not do this in order to—they could do something else.

Senator KENNEDY. You would ease up the waiver position?

Dr. EBERT. And we ease up the waiver position. I think there are a number of schools where it would be a very real hardship. I think it would have to be demonstrated.

Senator KENNEDY. You are satisfied with the kind of program that you have outlined, more flexible waiver provisions, and carefully constructed language, so that the Secretary has that opportunity not to put the additional burden on some medical schools that we still need the increased numbers, just in terms of total numbers?

Dr. EBERT. I believe there is more in terms of what I might call equity rather than perhaps absolute need.

Senator KENNEDY. I see.

Dr. EBERT. I think there are substantial numbers of qualified students who could enter, profitably enter the profession. I think also we clearly have to fill the gap if we are going to cut down on FMG's.

So I believe there is that real need.

Senator KENNEDY. Certainly, while we are trying to deal with the FMG problem, until we begin to understand whether the stricter controls in those areas of the issue of quality, and knowing the implication on that, certainly we may very well be in danger not to take full opportunity.

OK. Thank you.

Dr. EBERT. Required service in underserved areas. I support the concept of a National Health Service Corps and the principle of national service in return for scholarship support.

It is my belief that national service can be of positive value to medical school graduates and may help to shape plans. National service by a substantial number of medical school graduates could provide immediate relief to many medically underserved areas in this country, both urban and rural. I would caution, however, that this is only a short-term solution and not one which, by itself, will correct the inequities in our care system.



The opportunity exists to work toward a more permanent solution to the problem of maldistribution of health services. This could be done by requiring that National Health Service Corps physicians in underserved areas would have formal relationships with nearby community hospitals and regional medical centers.

I support the goal of 50 percent of medical school graduates serving in underserved areas but, again, would caution against arriving at this percentage too rapidly. I say this because it will take time to plan a network that will use both National Health Service Corps physicians and regional resources effectively. The ultimate goal should be the permanent recruitment of physicians to underserved areas, and this is best accomplished by insuring that the National Health Service Corps physician has a constructive experience.

If planning is inadequate, the impact of the young physician's experience is likely to be negative. Perhaps the 50-percent goal could be set with the proviso that the Secretary would make annual recommendations based on adequate planning for the effective use of physicians recruited for national service.

Senator KENNEDY. It will really take 7 years to get them out of the pipeline.

Dr. EBERT. Yes.

Senator KENNEDY. Does that not give us time?

Dr. EBERT. That is true.

All I am saying is as a part of this, there should be forward planning. There should be planning so that these men and women are effectively used.

But I agree with you that it does take that long.

I support the concept of 1 year of service for each year of scholarship support. There should be a buy-out provision in lieu of service, and I agree that this should be twice the amount of assistance received, plus compound interest at market rates, dating back to the first year of scholarship support. It is my guess that initially national health service scholarships will be oversubscribed by volunteers. However, in the event that there are too few volunteers to meet the recommended quota, I suggest that the remaining positions should be filled by a national lottery administered by HEW or the Association of American Medical Colleges, and that all students accepted by American medical schools who had not volunteered would be eligible for such a lottery.

Those selected by lot would be eligible to receive national health service scholarship support for up to 4 years with the understanding that all recipients of scholarship support, including both volunteers and those chosen by lot, would be required to serve 1 year for each year of assistance but, in no case, for less than 2 years.

Service would be required after 3 years of residency training unless it were in the national interest to delay service until the completion of residency programs longer than 3 years.

Residency positions in primary care. There needs to be a better distribution between those physicians providing primary care and those providing specialty services.

You will notice that I have stated the problem in somewhat different terms than those usually used, and I do so because the issue



is not simply how physicians are trained but the organizational framework in which they practice as well.

I would also point out that our goal should be access to comprehensive care for all and not simply primary care. Let me give an example. The Harvard Community Health Plan is a prepaid system which provides comprehensive care for a population in excess of 50,000. Primary care is provided by well-trained internists, pediatricians and obstetricians. Many of these physicians are knowledgeable in medical subspecialties, but the organization of the practice is such that they all work as primary care physicians.

I make this point because we need to look at organization of care as well as manpower training if we are to solve the problem. I would include as primary care training the residencies in family practice, the first 3 years of internal medicine residencies, the first 2 years of general pediatrics residencies, and the first 3 years of obstetrical training.

I support the concept that 50 percent of the approved residencies in this country should be in primary care, using the term primary care training as defined above. Some will argue that this is a percentage arrived at without hard data based on a careful analysis of manpower needs.

In defense of the figure 50 percent, it can be stated that in large comprehensive care plans, such as Kaiser Permanente, approximately 50 percent of the medical manpower needed is in primary care.

I believe it is somewhat higher than that, perhaps close to 60 percent.

There are two ways in which one could attain the redistribution of residencies among the specialties. One would be to place an overall ceiling on the number of approved residencies with quotas for each of the specialties. The second is to require that each medical school that wishes to qualify for capitation would be required to meet the 50 percent quota in primary care. Personally, I would favor the first alternative, since it would take into account the different capabilities of the Nation's medical schools.

If, however, the committee should choose the second alternative, I would suggest two exceptions. A relatively small number of medical schools have large numbers of residents in affiliated programs, and these programs are of high quality. The only way such institutions could comply with the 50 percent requirement would be to discontinue present programs which, in my view, represent a national asset.

I would suggest that such schools be permitted to comply by having a minimum of 220 residency positions in primary care.

Second, there are a few schools that have very large programs in specialty areas, such as psychiatry. These programs are of high quality and should not be sacrificed for the sake of compliance.

I would suggest that the Secretary be given the discretion to exclude such special programs in calculating the 50 percent quota.

Overall ceiling on approved residency training positions in this country. I believe there should be a ceiling on residency positions so that an excess of residencies is not used as an excuse to recruit foreign medical graduates. I would favor the approval of first-year residencies equal to 110 percent of the number of graduates of American medical

schools and suggest that subsequent years of training be controlled by a similar formula.

It is also important to develop an ongoing review mechanism that would permit the allocation of residency positions in the various specialties on the basis of national need.

Let me now simply list other provisions which I would support.

One. Special scholarships for the disadvantaged for preadmission assistance and scholarship support the first year.

Two. An identifiable administrative unit in primary care and/or family medicine provided that there is flexibility in how each medical school implements this requirement.

Three. The recommendation that foreign medical graduates should meet precisely the same examination requirements as American graduates before assuming patient care responsibilities and that, further, demonstrated fluency in English be required.

Four. Minimum standards for licensure and recertification of physicians on a national basis.

Five. The creation of a national health manpower analysis capability in HEW.

Six. Funds for health facilities construction for primary care facilities and construction necessitated by enrollment increases.

I recognize that this subcommittee cannot implement the following suggestion. Nevertheless, I believe it is important to draw it to your attention.

Most residencies are supported by third-party payors and support is justified on the basis of service provided to the hospital. There is no regular reimbursement for residents working in ambulatory settings which are not a part of the hospital. This poses a serious problem for medical schools that wish to expand the ambulatory medical experience for primary care residents.

I submit that this is a serious deficiency and that some means be found for paying residents for time spent in training outside the hospital setting.

Thank you, Senator.

Senator KENNEDY. Let me just ask you, Doctor, how are you going to handle in your medical schools or meet what you have outlined here as 50 percent residencies in primary care?

Dr. EBERT. I think we want to meet the 220 because we have 900 interns and residents in our programs that are affiliated. And if we were trying to meet with, say, 450, there is almost no way we could do this without cutting out residents.

I would point out, and I think others will, too, that we do not have direct control over the residencies because they are part of the hospital. There is that separation. But we would, I think, with some difficulty, meet 220 or some larger number of developing new programs and affiliated programs in other parts of the Commonwealth of Massachusetts or, indeed, other parts of New England.

Senator KENNEDY. Does that mean a reduction in other residencies?

Dr. EBERT. I think there will actually be some reduction in some of the others, Senator.

I would guess that we might wish in the long haul to consolidate some of the residencies, let us say, in some of the surgical specialties.



I would also submit on a national basis I would not like to see some of the schools that have very strong programs in specialties sacrifice these just for the sake of compliance, to have them substituted for by others that are not as good.

Senator KENNEDY. Let me just say this is really excellent testimony and enormously valuable and helpful to us on the committee.

We have, and I know you have, been giving this a good deal of time and effort and thought on how we are going to try and do something about the manpower problems, and I think all of us have recognized that it cannot be and will not be resolved by medical schools alone.

I do not pretend that that holds the answer, but they can play a very important role.

Your testimony here has shown enormous statesmanship in trying to help at least this committee and the Congress to develop a program that is going to be meaningful in an attempt to deal with this problem.

We are enormously grateful and very much impressed by your willingness to come to grips with some really very, very hard problems.

I do not underestimate the long hours and the various discussions that have been taking place, certainly within your own medical school and those of your associates with whom you have talked, because it is a tough, difficult issue and a problem that we are all faced with.

I must say that I think it is testimony which will be of great value and help to us. I am sure if we follow what is in your testimony, your country will be well-served with a superior manpower program.

We are indebted to you, and we would like to feel we can stay in touch with you.

Dr. EBERT. Thank you.

Senator KENNEDY. Thank you very much.

I would like to welcome Dr. Tapley, dean, Columbia University College of Physicians and Surgeons, one of the Nation's leaders in academic medicine. And we are anxious to have him present his views.

#### **STATEMENT OF DR. DONALD F. TAPLEY, M.D., DEAN, COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS**

Dr. TAPLEY. Mr. Chairman, members of the committee, my name is Donald Tapley. I am dean of the faculty of medicine of the college of physicians and surgeons of Columbia University in the city of New York. I appreciate the opportunity to make this statement for the record.

Each year the college of physicians and surgeons graduates some 145 physicians, and trains over 1,500 other students in professions closely related to medicine. Through its affiliated hospitals the college of physicians and surgeons is a central provider of health care to the largely poor population of northern Manhattan, an area that in recent years has suffered a serious undersupply of practicing physicians, and to the suburban and rural populations of northern New Jersey and upper New York State. The pending legislation on health manpower is thus of great importance to our institution, and I am grateful for the opportunity to comment on it today.



Rather than making extended general comments, I think it would be more useful to express my opinion directly on a number of specific items in the proposed legislation. I would like first to address the issue of capitation.

Capitation permits the establishment of a stable base for financing medical student education, the current support of which is extremely complex. A recent study of the institutional costs in the private medical schools in New York State has been conducted using the methodology developed by the Institute of Medicine of the National Academy of Sciences at the request of the Congress. These studies revealed that of the net educational cost, approximately \$12,000 per year, about one-third is borne by student tuition, one-third by State funds and only one-eighth by Federal capitation funds. The rest is provided by so-called "institutional" funds. These "institutional" funds consist partly of endowment income, but more importantly of research and patient-care funds which are supporting educational expenses, which is of course permissible, but provides a very uncertain and unstable base. A special task force appointed by the regents of the State of New York has suggested that one-third of the costs of medical student education should be borne by the students, one-third by the State, and one-third by Federal educational funds. The task force suggested that the Federal share of educational costs should be, on the average, \$4,000 per year per student. That is a figure which I support and would commend to you as a national goal. Stable capitation funding at such levels, or at least at the levels contained in the House bill, would permit schools of medicine to engage in more rational long-term planning to meet their educational objectives as well as the Nation's objectives.

While greater commitment on the part of medical schools to primary care training is desirable, I am sure you understand that medical schools do not control the practice opportunities of their graduates. Only a coherent Federal policy can adequately solve the geographic maldistribution problem, by making undesirable locations more attractive. I trust that the Congress will address itself directly to this problem as soon as possible.

As an interim solution, I would reluctantly support linking scholarship financing to mandatory governmental requirements for postgraduate service in underserved areas. In the interests of equity, I would prefer a plan under which all students contract with the Government to serve in the National Health Service Corps if required. The selection of those needed for service, over and above those who have volunteered, should be by lottery. Such a plan should insure, in addition, that financially disadvantaged students not selected on a first-come, first-served basis or by lottery would receive the same scholarship aid. They should be relieved of the payback provision if not chosen in the lottery.

If the Government is to provide scholarships, they need to be of adequate size. Scholarships should, as is proposed in the subcommittee bill, include full tuition and living expenses, and a mechanism should be provided for adjustment to increases in the cost of living or of tuition. I should emphasize that many of our students leave school

with an indebtedness of \$20,000 or more. The burden such debt places on young families is very great, and seriously distorts career choices. However idealistic or committed to service these students may be, the burden of debt induces speciality and locational choices that further exacerbate the current maldistribution problems.

In the interest of equity I would support stringent "buy out" provisions for those who have volunteered service in exchange for scholarships. Such provisions are preferable to a total prohibition on "buy out" in order to accommodate unusual or unpredictable exigencies in personal life.

In terms of specialty maldistribution I would support the requirement that, as a condition for capitation, schools should provide by fiscal year 1979 in their affiliated hospitals a large proportion of house staff positions in primary care specialties—internal medicine, pediatrics, obstetrics and gynecology, and family medicine. It is important that you understand that the medical schools do not control the budgets which determine the numbers or distribution of house staff positions in their affiliated hospitals. Most medical schools do not own their hospitals. I would strongly urge that the percentage of positions in these disciplines should be calculated on the basis of the total positions offered in all of the affiliated hospitals of any particular school. This would allow for appropriate diversity in programs, as well as the most effective allocation of resources and facilities. I believe a target of 50 percent is unrealistic as a national goal by 1979 and would urge your consideration of a target of 40 percent. If the overall national goal of 50 percent such positions is sustained—which I advise against—an alternative goal of 50 percent or 300 such positions whichever is lower, should be set. This would permit those schools which constitute unique national resources in terms of specialty training to continue to so serve without impairing the national goal of developing more primary care physicians.

I fully support national ceilings on approved residencies, provided the ceilings for individual programs are determined on a national rather than regional basis. It would be unwise to achieve the laudable public goal of reducing the supply of specialists by weakening, or perhaps even destroying those institutions and programs which produce the best-trained specialists. If there are to be proportionately fewer physicians in some specialties, it becomes all the more important that they receive the best training possible. This will necessitate an impartial, national system of residency approval, which will preserve the best specialty residency programs as a national resource.

I support the position that medical schools should be requested to establish identifiable teaching units in primary care. I have used the word "requested" rather than "required" to avoid the unfortunate situation in which the Congress would be mandating internal structural changes within the academic institutions. It is inconceivable to me that these institutions can adequately respond to the mandate to train more primary care physicians without the development of the appropriate teaching divisions. Special project funds should be made available to aid such a development. I would be strongly opposed to the suggestion that such units be separate departments. Rather, I



would suggest that they should be interdisciplinary programs or divisions within departments. The creation of separate primary care departments could be disruptive to many schools and could only relegate primary care to second-class status within the profession, to the detriment of patient care.

I do not support mandatory increases in class size as a condition for capitation. I am not persuaded that increased numbers of physicians will solve the problems of geographic and specialty maldistribution which you are addressing the proposed legislation.

On the issue of foreign medical students, I support in general the provisions of the Immigration Act amendments which passed the Senate last year. I feel, however, that any special program to assist American-born "FMG's" in obtaining the additional training necessary to qualify for American standards of practice should apply only to those students actually enrolled in foreign medical schools on or before July 1976. After that, the programs should be phased out. In this way, inequities would be avoided while the undesirable practice of encouraging American students to attend foreign medical schools would not continue.

On the issue of the National Health Service Corps, I cannot emphasize strongly enough the importance of giving top priority to the assignment of National Health Service Corps personnel to those urban hospitals which are now particularly reliant on foreign medical graduates. Failure to develop this priority placement of National Health Service Corps personnel would have a very deleterious effect on those urban hospitals and on the poor who rely upon them for their medical care.

Finally, I would like to make two recommendations for the committee's consideration.

First: The legitimate and necessary concern of the Congress with the issue of specialty training directs attention to the financing of postgraduate education. As the Congress moves to a national policy on specialty training and physician distribution, it should consider the current methods of financing such education. The recent cost study conducted in New York schools showed that the average instructional cost to the College of Physicians & Surgeons for house staff training was \$13,408 for each intern and resident per year not including the stipend they are paid. These "students" do not pay tuition and the cost of supporting faculty to educate them is as great as the cost of providing for medical students' education. I have appended to this statement the overwhelming instructional costs to Columbia for each category of student for the committee's information and inclusion in the record. There is an urgent need to rationalize the educational support of house staff training just as there is an urgent need for a rational approach to the numbers of physicians trained. Patient care dollars and research dollars can no longer bear the burden.

Second: It seems to me particularly important that, if Congress is to adopt this kind of manpower bill, it should mandate adequate funds to support an evaluation of programs and policies aimed at retaining National Health Service Corps personnel in underserved areas once their period of obligation is concluded. Long-term solutions to the



problem of providing care in underserved areas cannot depend on a revolving door in which young physicians serve their years and then move on. Mechanisms for retaining National Health Service Corps personnel in areas to which they are originally assigned should be designed, tested, and evaluated. Such an effort should support both the establishment of a comprehensive data base and longitudinal studies on the effectiveness of the program. The rapid and sizable expansion of the National Health Service Corps envisaged in all the pending legislation provides a unique and important opportunity for systematic research and testing of comprehensive health care systems, which should not be permitted to pass unacted upon.

Thank you again for the opportunity to appear here today. I would be happy to answer any questions you may wish to direct to me.

Senator KENNEDY. Thank you very much, Doctor.

I'm wondering whether in your consideration of this testimony you have had an opportunity to talk with any of the deans in the New York area, in the State, and if there's anything you can tell us about their general reactions?

Dr. TAPLEY. None of the other deans in New York State have actually seen this testimony. I've read it to all of them and I can give you the list of them, and I believe they are all in substantial agreement with the testimony: Dr. Stuart Bondurant, executive vice president and dean, Albany Medical College of Union University; Dr. Ephriam Friedman, vice president for medical affairs and dean, Albert Einstein College of Medicine of Yeshiva University; Dr. J. Robert Buchanan, dean, Cornell University Medical College; Dr. Thomas C. Chalmers, resident and dean, Mt. Sinai School of Medicine of the City University of New York; Dr. Samuel H. Rubin, vice president for academic affairs and dean; Dr. Ivan L. Bennett, Jr., vice president, University School of Medicine; New York Medical College for Health Affairs; Dr. J. Lowell Orbison, dean and director of the medical center, the University of Rochester School of Medicine and Dentistry; Dr. John Naughton, dean, State University of New York at the Buffalo School of Medicine; Dr. Leonard Laster, dean and vice president for academic and clinical affairs for the University of New York Downstate Medical Center; Dr. Marvin Kirchner, dean, State University of New York at Stony Brook School of Medicine; Dr. Richard P. Schmidt, president, State University of New York, Upstate Medical Center.

Senator KENNEDY. That is, I think, very interesting and very heartening as well.

I think the suggestion you make in terms of the evaluation is obviously something which would be enormously useful.

I am strongly in support of that proposition. So we will try and work with you in terms of moving that forward. I know Senator Javits had planned to be here to introduce you. I'm sure he will come rushing through the door in a few moments. I'm sure he would want me to extend a warm welcome to you.

It has been very helpful testimony. I appreciate it very much.

Dr. TAPLEY. Thank you.

[Information supplied follows:]

COLUMBIA UNIVERSITY  
COLLEGE OF PHYSICIANS AND SURGEONS

INSTRUCTION COSTS PER STUDENT

FY1974

| <u>STUDENT TYPE</u>             | <u>TOTAL PROGRAM<br/>COSTS (in \$000)</u> | <u>NUMBER OF<br/>FTE STUDENTS</u> | <u>PER STUDENT<br/>INSTRUCTION COSTS<br/>.....(in \$).....</u> |
|---------------------------------|---|-----------------------------------|--|
| Medical Students                | \$8,485                                   | 580                               | \$14,629   |
| House Staff*                    | 9,627                                     | 718                               | 13,408   |
| Postdoctorate (Psychiatry)      | 751                                       | 38                                | 19,774   |
| Ph.D. Basic Science**           | 1,908                                     | 148                               | 12,890   |
| Nutrition Student               | 254                                       | 34                                | 7,459  |
| Public Health Student           | 2,196                                     | 205                               | 10,714   |
| Nursing Student (B.S.)          | 1,435                                     | 326                               | 4,400  |
| Nursing Student (M.S.)          | 430                                       | 32                                | 13,434   |
| Allied Health Student<br>(B.S.) | 344                                       | 42                                | 8,191  |
| Allied Health Student<br>(M.S.) | 359                                       | <u>63</u>                         | 5,693  |
| Total                           |   | 2,186                             |  |

Program Cost Study for Columbia University, College of  
Physicians & Surgeons, June 1975

Prepared by

Lewin & Associates, Inc.  
Washington, D.C. 20024

American Management Systems, Inc.  
Arlington, Virginia 22209

\* includes Clinical Fellows

\*\* includes Research Fellows in Basic Sciences



Senator KENNEDY. Our next witness is Dr. John I. Sandson, dean, Boston University School of Medicine. Dr. Sandson has a long distinguished medical career, played an important role in Massachusetts medical community. We're delighted to have you here.

**STATEMENT OF JOHN I. SANDSON, M.D., DEAN, BOSTON UNIVERSITY  
SCHOOL OF MEDICINE**

Dr. SANDSON. Mr. Chairman and members of the subcommittee, and ladies and gentlemen, the Comprehensive Health Manpower Training Act of 1971—Public Law 92-157—initiated the Federal capitation program for schools of medicine, osteopathy, and dentistry. This program has made a substantial contribution to the basic operating expenses in these schools. The two prime objectives of the Comprehensive Health Manpower Training Act of 1971 have to a great extent been accomplished—(1) the contribution to base operating expenses has been associated with a marked decrease in the number of health professions schools applying for financial distress grants, and (2) the number of available places in the health professions schools, especially medical schools, has been substantially increased. At Boston University School of Medicine an increase of 40 percent has occurred in the size of the entering class since 1971.

At this time when new legislation is being considered by this subcommittee, it is important to emphasize that the last Manpower Act was a success and did, indeed, accomplish its main objectives. That it did not solve all the problems in health manpower should not be a surprise. Two of the most difficult problems that remain unsolved are (1) the geographic maldistribution of physicians. The new health manpower bill must specifically address these two issues. I believe that most of the medical schools in this country view these as very important issues. At Boston University School of Medicine we have been actively discussing these problems and would like to help solve them.

As a medical school in a major city we are particularly concerned about the impact of these problems on the inner city. All too often inner city areas have not even been listed as underserved. This is because the sparsity of doctors delivering primary care in the inner city often gets obscured statistically by the large number of physicians in areas immediately adjacent. The inner cities in the two areas I know personally—New York City and Boston—are underserved and need help. They especially need more well trained health personnel, including primary care physicians trained in the concepts of working well with other health-care personnel and willing to work in neighborhood health centers or in small group practices. The health care delivery problems in the inner city are considerably different than in rural areas. Primary care in the inner city can best be delivered by general internists and general pediatricians working together in small teams with nurses, social workers, nutritionists, and other health professionals. The team must provide continuity of care that is both personal and humane. The scope of primary care is different in the inner city than in most rural areas—it does not usually include competency in obstetrics, surgery, orthopedics, or operative gynecology, but rather emphasizes the diagnostic and treatment skills encompassed by gen-



eral internal medicine and pediatrics, and also includes a great deal of the office skills needed in psychiatry, gynecology, otolaryngology, and dermatology, and has a heavy emphasis on continuity of care, home care, and knowledge of family problems.

At Boston University School of Medicine we believe each student should have an opportunity to receive an experience in primary care—either in the urban or rural model—preferably in the third year of medical school before a career choice is made. We are in the process of developing adequate clinical facilities for such experiences. Unfortunately, these facilities are not available in the number necessary. Good models of primary care delivery in the inner city do exist in Boston but extensive medical student teaching does not take place in many of them. The reasons for this are multiple: (1) lack of space; (2) increased operating costs caused by the introduction of medical student teaching; and (3) concern on the part of many neighborhood health centers that the introduction of teaching will make the care less continuous, less personal, and less humane. These are not easy problems to solve. Additional fiscal resources will be needed. Moneys for new construction will be necessary. The incremental increase in operating costs must be paid by the third party carriers or by some more direct and more appropriate mechanism. And all the concerns about teaching must be overcome by making certain that the students do not become the ongoing care providers but rather are superimposed on a delivery system that would be providing excellent continuous care even if the student were not present. An urban area health education center in Boston could help solve many of these problems.

In considering solutions to the geographic and specialty maldistribution of physicians, it is important to remember that most medical students today are not able to pay the costs of their medical education. They require large amounts of financial aid. Two-thirds of the students at Boston University School of Medicine have to borrow very substantial amounts of money to cover their tuition and living expenses. The tuition at Boston University School of Medicine is currently \$4,900 a year. The high tuition is necessary because Boston University School of Medicine receives no subsidy from the Commonwealth of Massachusetts or from the city of Boston. The only tax-supported subsidy we receive is the \$1,700 per student Federal capitation award. Our students need \$8,000 to \$9,000 each year to meet expenses. Inflation will increase these costs. The medical students may have large incomes in the 1980's but most do not have much money now. The new health manpower bill needs to find a way to provide the medical student with scholarships and/or loans. Otherwise, many able students, especially from the disadvantaged groups, will be discouraged from undertaking a medical career.

It makes extraordinary sense to couple the solution of geographic maldistribution of physicians with the financial needs of the students. Many students would be willing to serve for several years in underserved areas in return for generous scholarship support. If proper health facilities are established in the underserved areas, a percentage of these students may elect to stay in the underserved areas for longer than the number of years required by the scholarship.

I am strongly in favor of a markedly expanded National Health Service Corps. I would like to see it increased to accommodate all who

wish to enter. It would be highly desirable to significantly increase the number of National Health Service Corps scholarships available for students who are currently in medical school, as well as those who are about to enter school.

A markedly expanded National Health Service Corps that could accommodate all who desire to enter would be very expensive but certainly the best way to improve the geographic maldistribution of physicians. The present and proposed National Health Service Corps awards are quite generous, perhaps more generous than necessary to attract students. A somewhat less generous award—tuition plus \$3,500—would still be very attractive and, using the same total dollars, could accommodate many more students.

It is important to increase the number of National Health Service Corps scholarships available to students who are currently in the second and third years of medical school; otherwise, the payoff in this program will be delayed too long. There is a need to do something about geographic maldistribution of physicians now. If the numbers of National Health Service Corps scholarships are increased only for students entering medical school in 1976 or later, there will be no impact of the program on geographic maldistribution until at least 1981. By that time the program will have been judged by many as either misconceived or a failure.

A requirement for capitation that necessitates a percentage of the entering class to accept National Health Service Corps scholarships could work. Great care would have to be taken not to disrupt the admissions process. The first step in the admissions process must still remain the selection of the most-qualified students. One would then ascertain which of the most-qualified students would accept a National Health Service Corps scholarship. My fear is that the program will be greatly oversubscribed. I am not certain how one would then select those who should receive the awards. A lottery would be one option. Another would be to make awards on the basis of need. It might be more equitable not only to require each school to obtain a commitment from a significant percentage of the entering students but to make more scholarships available, if needed, so that every accepted student who wanted a National Health Service Corps scholarship could obtain it. As I suggested previously, perhaps the amount of the scholarship should be somewhat reduced so that more students could receive National Health Service Corps scholarships.

There is no easy answer to the problem of specialty maldistribution. I support the goal of 50 percent of total residencies in this country being in primary care disciplines. This is a reasonable goal if primary care is defined broadly to include all general internal medicine, general pediatrics, family practice, general practice, and a percentage of obstetrics and psychiatry residencies. The best method to achieve this goal is not clear. To attempt to accomplish this goal as a requirement of capitation may be unrealistic. Many medical schools don't fund resident salaries and, therefore, don't have total control of the residency programs. I believe the goal can best be accomplished by placing certain requirements on hospitals in order to be reimbursed for residents' salaries. The goal of 50 percent of the total residencies in primary care is an average for the Nation and probably cannot be



applied in each hospital at exactly the same level. I am certain that there will be some hospitals that cannot achieve the 50 percent goal without serious disruption of excellent teaching and training programs. Enough flexibility needs to be present so that the national goal can be achieved without dismantling some outstanding house staff programs. It is essential that the medical schools have input into this process but not by making it a requirement for capitation.

It is important that medical schools develop administrative units in primary care. These units need not follow any one particular mode. Some schools have departments of family practice, others have sections in general medicine. At Boston University School of Medicine primary care is viewed as interdepartmental in nature and the undergraduate educational program in primary care will be administered from the dean's office with the senior associate dean in charge. The mission of the unit will be to coordinate and implement primary care education in the undergraduate medical school curriculum and to foster the further development of house-staff programs in primary care in the hospitals affiliated with the medical school. Boston University School of Medicine's primary care residency at Boston City Hospital is now in its third year and is an excellent example of a training program for the urban model of primary care.

The number of students in American medical schools still need to be somewhat increased if we are to become less dependent on physicians trained elsewhere. Large numbers of American students still must travel abroad to study medicine and a large percentage of the physicians licensed in this country each year are trained outside this country. An increase in class size can be accomplished more economically in existing schools than by building new schools. Most medical schools have markedly increased class size in the last decade. A further very modest increase in size will be possible in some schools but additional resources will probably be necessary. At Boston University School of Medicine, an increase in class size in the first year would be very difficult. However, expansion at the third year is probably feasible but only by development of new hospital affiliations and new teaching relationships with neighborhood health centers and other ambulatory facilities.

Finally, I would like to say a few words about capitation awards. These awards provide medical schools with very essential unrestricted funds. At Boston University School of Medicine, our award was decreased 20 percent last year. Medical schools are a valuable national resource and need to be involved in solving all the problems that I have been discussing. Boston University School of Medicine needs the capitation awards at least the present level if it is to maintain its excellent teaching programs and to participate effectively in the solution of these important problems. The capitation awards need to be increased, not decreased. Tuition was increased at Boston University School of Medicine \$1,200 last year to the present level of \$4,900. A further decrease in capitation will result in an additional tuition increase. With the tuition at \$4,900 and very little scholarship money available, many disadvantaged students are choosing not to come to Boston University School of Medicine. If we are to accomplish all that is needed to develop a vigorous program aimed at training various types of health



personnel for the inner city and a successful program for the recruitment of disadvantaged students, our capitation support must at least be kept stable (i.e., \$1,700 per student). The National Health Service Corps scholarships will not make up for a decrease in capitation moneys unless tuition is significantly raised. Further significant increases in tuition at Boston University School of Medicine will adversely affect certain of our programs unless the National Health Service Corps scholarship program is available to all who want it or a new low-interest, long-term loan system is developed under the new manpower legislation being developed by this subcommittee. The experience with capitation since 1971 shows that it can succeed in achieving realistic objectives in health manpower. I would urge you once again to delineate objectives that are realistic and to continue the capitation program at least at its present level.

One final suggestion: Consideration should also be given to a new program of differential capitation. Schools that receive no State aid or support, and whose only source of tax-supported unrestricted funds are from Federal capitation awards, should be eligible for additional capitation if they undertake special health manpower programs considered to be of very high national priority. The number of such schools are few and the fiscal position of some is rather marginal. Some, such as Boston University School of Medicine, already have a relatively high tuition. Such a program would not be expensive, would make more equitable the tax-supported funds available to medical schools, and would enable special important health manpower objectives to be met.

Thank you for giving me this opportunity to present my views. I shall be pleased to answer any questions you may have.

Senator KENNEDY. Thank you very much.

I would like to see that too, to try to help you out, Doctor. The thing that obviously concerns us, if we adopted that, whether State legislatures would cut back, and this would be sort of self-fulfilling prophecy.

I agree with you that no dean of a medical school ought to have to come down here, hat in hand, and have to make a case in terms of financial distress, particularly when they are providing these important services to the people of Boston.

Let me ask you, although you have got the concern of 50 percent of residency, would you still support 50 percent as an overall limit, nationwide?

Dr. SANDSON. I do support it. I think it is quite correct as an objective and goal. The problem is how to figure out its implementation so that some of the very outstanding housestaff programs which do tend to aggregate will not be harmed. I find this a complicated problem, and I do not have an easy, ready solution.

Senator Kennedy. You would rather have it done at the national level and assure a number of residencies, with more flexibility rather than required?

Dr. SANDSON. Yes.

Senator KENNEDY. But you would support it if it were on a national level?

Dr. SANDSON. I support it on the basis of a national level, yes.

Senator KENNEDY. Thank you very much. You've been very helpful.

The fourth witness this morning is Dr. Lauro F. Cavazos, dean of Tufts University School of Medicine.

Tufts was really the creator of our neighborhood health center concept back in Columbia Point, down in Bayou County, from that model we've been able to get a tremendous number of health centers built in the country—not nearly enough. We've really been very imaginative in trying to get services out to the people. I think that is a great credit.

This is almost Massachusetts day down here in terms of the witnesses.

**STATEMENT OF DR. LAURO F. CAVAZOS, DEAN, TUFTS UNIVERSITY SCHOOL OF MEDICINE, MEDFORD, MASS.**

Dr. CAVAZOS. Yes, Senator. Therefore, on behalf of Tufts University School of Medicine, I welcome and appreciate the opportunity to testify on the legislation pending before this subcommittee.

At the outset, I should make it clear that while I have reservations about some of the specific proposals, I do support in principle the legislation which the subcommittee is now considering. I strongly agree with the concept that medical schools must respond positively to documented national health manpower needs. Similarly, medical students who receive direct Federal assistance should be prepared to repay this assistance in similar fashion. But most important, when the commitment of a school or a student is substantial, the assistance offered in return by the Federal sector must be comparable.

I would like to refer to some of the specific elements in the proposed Health Manpower Act of 1975 and offer my comments and suggestions.

I cannot urge too strongly continuation of capitation support. As a private school with extremely limited endowment and no financial assistance from the Commonwealth of Massachusetts continued capitation support at a reasonable level is absolutely essential if Tufts is to continue to exist as a quality school responsive to society's needs.

Senator KENNEDY. We are just learning how cheap Massachusetts is in terms of supporting medical schools. [Laughter.]

Dr. CAVAZOS. Despite our extremely limited resources and chronic financial problems, we pride ourselves on our willingness to accept and act upon our public responsibilities. With your permission I would like to recount briefly some of our efforts.

Tufts Medical School historically has been the largest single resource for primary care practitioners in New England. Although our graduates practice in every one of the 50 States, fully 60 percent of them are situated in New England; of this figure, 43 percent practice in Massachusetts.

We pioneered in the field of neighborhood health centers, namely the OEO-sponsored effort at Columbia Point, the first of its kind in the Nation. We also demonstrated the value of community-related health programs by our involvement in a rural health project in one of



the Nation's poorest counties (Bolivar County in Mississippi), and were among the first, if not the first medical school, to establish in the mid-1960's disadvantaged and minority student recruitment goals based upon national population composition.

Our programs have had national impact in shaping national models for regionalized primary medical care. Working with the Bingham Associates program, Tufts has developed a long and productive partnership with more than 40 hospitals in the State of Maine stressing regionalization and decentralization of physicians' services while increasing access to quality medical care. It is appropriate to note here that in 1944 Surgeon General Thomas Parran recommended to Congress that it adopt a nationwide plan of regional medicine based on the Tufts-Bingham program. Congressional leaders, however, opted as the initial step toward regionalization a hospital construction program, from which emerged the Hill-Burton Act. The Tufts-Bingham program is also seen as the forerunner of the regional medical program concept two decades later. Our advocacy of delivering quality medical care to underserved regions is reflected most recently, we feel, in our selection as the only private medical school of 11 across the Nation to participate in an Area Health Education Center (AHEC) contract. With AHEC support, we have significantly augmented our clinical training of undergraduate students in medically underserved areas remote from our Metropolitan Boston medical center. Indeed, 100 of our enrolled students have served or now are serving clinical clerkships in Maine, and of 24 house officers in Maine under Tufts aegis, two-thirds have elected to stay there in clinical practice. This is of considerable importance to a State without a medical school which had fewer physicians in 1970 than at the turn of the century.

Moreover, in response to the Nation's goals of producing more physicians we have expanded our enrollments nearly one-third from 473 medical students in 1969-70 to a current total enrollment of 617.

I believe that Tufts, together with most other health professional schools throughout the Nation, wants to respond positively to the documented health manpower needs. This willingness is, however, predicated upon the expectation of some reasonable contribution to our long-term financial stability. Bear in mind that as enacted, the Comprehensive Health Manpower Act of 1971 appeared to offer great promise for solving many of our perennial funding problems. The capitation levels authorized by the Congress—\$2,500 per student per year with additional bonuses and financial incentives for accelerating the education process and physically expanding class size—was judged by most health educators as a fair and realistic support level. Unfortunately, reality has not matched expectation. The most recent support levels—approximately \$1,400 per student per year—are truly discouraging and have measurably contributed to the financial hardships faced by the private medical school, especially those with little or no endowment and no recourse to State assistance. Moreover, while capitation moneys have steadily decreased, the conditions for eligibility for the funds, albeit at 47 percent of the authorized level, have been steadfastly maintained.



These shortcomings notwithstanding, I remain convinced that the concept underlying capitation for the health sciences is valid. The current proposal championed by Senator Kennedy provides capitation support for schools which agree to set aside a certain fraction of the places in the first year class for students who agree to practice in a medically underserved area after completing their residencies. The figure quoted is 1 year for each year of scholarship assistance received. Tufts can support this provision if a reasonable fractional level is set and a phase-in period is allowed to meet that requirement. However, I believe that the 50 percent figure recommended as a minimum for the entering class unreasonably high for the first year of the program if we are to meet the goals of the act. Most schools are already well into their admissions process and curriculum planning and must be implemented accordingly.

The second requirement of an enrollment increase presents significant difficulties to us but can be acceptable if the increase is kept to the proposed figure of 5 percent or 10 students, whichever is more, and the allowance for increases made in the first or third year or a combination of the two. Increased enrollment means increased basic science and clinical facilities as well as additional faculty. Our 30 percent enrollment increase from 473 to 617 in the past 6 years has demanded major additions, modifications, renovations, and the use of endowment to accomodate the added students while maintaining a quality program. We have the smallest library of any medical school in the country despite our large enrollment. We do not have a lecture hall that can seat more than one class. In response to 1971 legislation we expanded our teaching laboratory facilities to handle an ultimate maximum class of 160. A 5-percent increase in our current first year class would require an enrollment of 161. We have no unused space. There is no way to expand our current facilities except through new construction. If enrollment increase is a requirement, then I would urge continuation of the health facilities construction program for the purposes recommended in Senator Kennedy's proposal and additional long-term funding in order to develop clinical teaching and support faculty.

The third condition, which requires schools to have at least 50 percent of their affiliated residencies in primary care by fiscal year 1979, presents Tufts with an unsolvable problem. Because we do not own any clinical facilities, we do not have direct control of the residency programs in our associated hospitals. We can recommend, urge, and cajole but we cannot direct that this condition be fulfilled. While I am personally sympathetic to this approach, I would request that, if accepted, the regulations be stated so as to recognize and provide for those schools which by themselves cannot guarantee compliance.

The final condition, which would require schools to establish an identifiable teaching unit in family medicine-primary care, would also be acceptable as long as the choice between family medicine and/or primary care remains. Limiting the nature of the unit to "family medicine" would, in my view, be too restrictive and not necessarily the only appropriate avenue to contributing to the solution of our current primary care problems.

All of these conditions involve significant commitment by the schools. As I mentioned before, if the commitment by the school is substantial, then the assistance offered in return must be comparable. My plea to you today is to recognize this fact and provide us with the assistance required to do the job. A capitation level of \$1,000 or \$1,500 would not allow us to maintain current programs without major tuition increases, let alone consider additional commitments. The proposed House level of \$2,100 would merely allow us to maintain our status quo at the economic brink. I cannot urge too strongly your consideration of a support level similar to that recommended by the Institute of Medicine study of \$3,250.

I believe that the Health Manpower Act is meant to recognize the health profession schools as a national resource and as such, to provide assistance to help them meet their basic needs so they might fulfill their national responsibilities. It should be recognized that schools differ in their basic needs. Medical schools are not all alike. We exhibit fundamental differences, particularly in the area of financial resources. Tufts is an example of a private school without significant endowment, without State aid, and without clinical income. These are facts of life over which we have no control. Furthermore, we are doing the absolute best with what we have and are always trying to expand our sources of financial support.

Tufts has one of the lowest operating budgets of any medical school in the United States. Despite escalating national health care costs, we have managed to hold the line by spartan economization coupled with efficient administrative practices. Nevertheless, we remain in the highest quintile in enrollments; our students consistently perform in the top quartile in National Board exams and continue to secure outstanding internships and residencies. These paradoxical achievements are good indices of the dedication of our faculty and testify to the quality of our academic programs. Our facilities remain minimal, in some cases they are substandard. In our top echelon of administrative people, the dean is the only person paid on a full-time basis by the university. All assistant and associate deans are supported for the most part by their clinical practices, leaving us administratively understaffed using any conventional measurement. Finally, we continue to rely—perhaps unrealistically—on very substantial amounts of volunteer teaching time donated by our clinical faculty.

I would like to add that our students bear a considerable part of the burden. The comment has been made that medical students pay only 10 percent to 20 percent of the cost of education in this country and should be made to assume a greater share of the load in view of what they might expect in return. This argument is used with some justification to reduce institutional support. Tufts students currently pay several times more than the national average for their education. They are already at a considerable disadvantage compared with students in well endowed or State supported schools. Unless capitation levels are increased, this disadvantage will be magnified and aggravated.

With this in mind, I would like to return to my comment made earlier advocating a capitation “bonus” or “differential” for schools like Tufts which do not have access to significant endowment or State aid.



I would propose that additional capitation aid be made available to schools that are willing to respond to national priority needs over and above the minimum requirements. These responses could take the form of exceeding minimum enrollment increases or allocating a larger percentage of freshman class slots for students who volunteer to serve in underserved areas.

Senator KENNEDY. I think that is a good suggestion. I was just asking counsel about that. We did provide in the bill that passed the Senate in terms of the 1971 Act some bonuses for those schools that went beyond the numbers that have been included. It was dropped in conference. But it seems to me that that has got a very substantial merit to it. I hope maybe we can work something out. We will look through the other legislation, trying to fashion some effort in that. We would like to see if your people have got some ideas on this. This is a good idea.

I think we try and provide incentives. I think this is a good idea.

Dr. CAVAZOS. Other high priority needs might also be addressed in this manner. This concept has some precedence. The Comprehensive Health Manpower Act of 1971 provided bonuses or increased capitation for enrollment increases over minimum requirements or for shortened curriculum. My proposal would limit added support to schools in need; particularly those which are not largely tax supported. I am convinced that this approach is superior to alternative, essentially stop-gap measures. This would not affect proven programs, for example, special project support directed to develop new programs or financial distress grants which have been and are invaluable. We seek continuing financial stability with a reasonably secure outlook to enable us to devise and implement the long range plans necessary to meet the Nation's health priorities. The best solution, as we perceive it, is possible through differential capitation. With this system we could offer the taxpayers the programs they need and maintain quality care in return for their financial assistance.

The alternative is substantial tuition increases over our already very high level which we feel would be unfair to the students and harmful to the basic character of our school. Even with substantial scholarship support proposed in the legislation before you, which incidentally, I heartily support, our students and the school will be at a greater competitive disadvantage to other well-endowed or State-tax-supported institutions. There is little doubt in my mind that Tufts would become an elitist school admitting only those able to pay. This is not the kind of school that we are or intend to become.

The voluntary scholarship program requiring a service payback or buyout with a penalty clause certainly receives my support. It is not unreasonable to request a return from the student for this kind of aid. Please bear in mind, however, that students from Tufts and other high-tuition schools now should a considerably greater financial burden than students in schools having recourse to outside aid. This makes buyout a far more difficult proposition for students in the less well-to-do schools and in this respect is discriminatory. It is for this reason that I ask you to consider capitation and scholarship aid as interdependent programs. A balanced, flexible program is essential.



I also strongly support the special scholarship program and pre-admission assistance program for disadvantaged students as outlined in Senator Kennedy's proposal. I support the proposal in the manpower regulations regarding licensure and grant programs including special projects, AHEC, financial distress, and construction, among others. I do not plan to offer any detailed statement regarding these proposals other than to encourage continuation of the grant programs including construction for the purposes stated.

As I mentioned earlier, Tufts is the only private medical school operating a DHEW funded AHEC program. We are also the only school operating a program entirely outside the borders of our own State. Our ability to work with our friends in Maine which is a medically underserved area is contingent on the fact that we are a private school and therefore flexible in our ability to extend our assistance. Our ability to cross State boundaries is also demonstrated by our development of the Mound Bayou Community Health Center in Mississippi in 1969-70.

I mention these in closing to illustrate the unique capabilities of the independent, private medical school and ask your assistance in helping us to preserve this national asset.

Thank you very much for the opportunity to be here.

Senator KENNEDY. On this question about the number of residencies, would you support a nationwide commitment toward 50 percent?

Dr. CAVAZOS. Yes; I think that is an excellent level, and I can support that. Obviously I run into it because I do not control a hospital. Certainly we should work toward that. In a survey of hospitals associated with Tufts we have come up very close to that already.

Senator KENNEDY. Would you support that with HEW, or CCME, or how would you do it?

Dr. CAVAZOS. I would think I would rather have HEW.

Senator KENNEDY. So would I.

OK. We would like to work with you on the proposals.

Thank you.

Dr. CAVAZOS. Thank you.

Senator KENNEDY. We will be back in touch with you, unless Senator Stafford has some questions.

Senator STAFFORD. I have no questions, Mr. Chairman.

Senator KENNEDY. Our next witness is Dr. William H. Luginbuhl, dean, University of Vermont College of Medicine.

We want to welcome Senator Stafford who is a very active member of this committee and extremely interested in these issues of health manpower in rural communities for any comments he would like to make in terms of welcoming Dr. Luginbuhl.

Senator STAFFORD. Thank you very much, Mr. Chairman. I do appreciate this chance to welcome the dean of Vermont's medical school to Washington and to express my appreciation to him for being willing to come down here and share with us his advice in our attempts to deal with some of the problems that medical colleges are facing today.

We think we have a very good medical school in Vermont and no small reason for that is the able dean, Bill Luginbuhl, who is our witness now. And I look forward to your testimony.

STATEMENT OF WILLIAM H. LUGINBUHL, M.D., DEAN, UNIVERSITY  
OF VERMONT COLLEGE OF MEDICINE, BURLINGTON, VT.

Dr. LUGINBUHL. Mr. Chairman, members of the committee, I have submitted written testimony.

I propose to summarize my testimony.

Before stating my views on some of the specific bill of health manpower legislation, I wish to state my assumptions in four key areas that form the basis of all my subsequent testimony.

These four areas deal with (1) the adequacy of physician supply; (2) the dangers of excessive numbers of physicians; (3) my assessment of the major medical manpower problems; and (4) the likelihood of solving these problems by manpower legislation alone.

Speaking to the first question or the first assumption, I feel that there will be adequate numbers of physicians in the United States graduated by our medical schools. It is not necessary to increase enrollment further or to encourage the immigration of foreign medical graduates. I believe there is a growing body of evidence to support that contention.

Senator KENNEDY. I think that just before leaving that point, I think we ought to get a good hard look at this question and I suppose an awful lot depends on what we do about the FMG's and how strict we become in terms of their ability to practice in the country, does it not? I suppose if we still have the numbers that obviously are coming in now, the kind of pressures will in terms of increased numbers are obviously reduced, and if we try and follow restrictive policy I suppose it becomes more a blurred issue, does it not? Can you talk on that point for a moment? We are attempting to tighten up on the whole area of FMG's. We have been over that whole issue now in detail with Dr. Cooper. We have made some specific recommendations on it. Is this not really a variable which would relate to the question about adequacy and sufficiency of numbers?

Dr. LUGINBUHL. Yes; I think what is done with the FMG question is very dependent on basic assumptions on the adequacy of numbers. If we feel we do not have enough physicians, obviously the foreign medical graduate is a resource. If on the other hand, we have enough physicians and if my second assumption is correct, that too many physicians can be a problem, a problem in terms of driving up the cost of care and actually having detrimental effects on quality, then it is a mistake to encourage immigration.

I think I really just did cover my second point.

Senator KENNEDY. I do not know how they test them in Canada. We can find out ourselves but I do not know what requirements that we put on FMG's in Canada. We can find that out. Proceed.

Dr. LUGINBUHL. My second assumption was just covered, that is excess numbers of physicians are not only unnecessary, but are actually disadvantageous. I think once again there is some evidence that too many physicians will tend to drive up the cost of care and may actually have a detrimental effect on quality.



My third assumption is that our major problems in physician manpower are geographic distribution problems and specialty distribution problems.

And, furthermore, that simply increasing the numbers of physicians will not solve either of those problems. That more direct action will be required.

My final assumption, point 4, is that the definitive solutions of the geographic and specialty distribution problem will require restructuring of economic incentives by altering the payment mechanisms for physician services, and that health manpower legislation will at best play a complementary role in arriving at these solutions.

Having made those four assumptions, I will propose to briefly discuss the health manpower legislation under five headings: (1) geographic distribution; (2) specialty distribution; (3) the question of foreign medical graduates; (4) licensures; (5) some of the other provisions under consideration.

Speaking first to the question of geographic distribution, I think that there are two possible ways of solving that problem. One would be a permanent solution that would get physicians to locate permanently in areas of need.

I think that will require economic incentives and is really not a part of health manpower legislation.

The second approach, temporary approach, in which graduates locate in areas for a period of years, is really National Health Service Corps approach, and I think that is the one that is influenced by manpower legislation.

Senator KENNEDY. Are you thinking of some kind of health insurance program that is going to provide the kind of reimbursement that makes it possible for people to serve in undeserved areas and make liveable income?

Dr. LUGINBUHL. Yes; I think that presently doctors make more money in the suburbs than they do in rural areas or inner cities.

Senator KENNEDY. The disparity is significant.

Dr. LUGINBUHL. Speaking to the interim approach, the National Health Service Corps approach, there are two ways in which we might get students to serve. One is a system whereby all students would have financial assistance, either directly or through the schools, and all students would be required to serve. A second would be a volunteer approach in which students would volunteer for exchange for support for them as individuals. I have polled my student body and somewhat to my surprise, they were equally divided between those two options.

I do feel if we use voluntary approach, and if the level of support is reasonably high, that large numbers of students will volunteer for service.

Speaking to the second point, specialty distribution. Once again I think there are two approaches, economic incentives or second, a limitation on the number trained.

I personally feel that both approaches are going to be required to solve this problem. The one approach which is related to manpower



legislation is a limitation on the number of residencies, and I frankly think that step is going to be necessary in order to solve this problem.

I do think that limiting the number of residencies poses a serious problem for some of our hospitals, hospitals that frankly are dependent on residents to deliver care. And one of the special points that I would like to try to make this morning is the desirability of offering those hospitals some alternative. I would suggest that if we limit the number of residencies, we should try to develop programs to train physician assistants or nurse practitioners that are hospital based to do the work that is currently done by residents.

There is a powerful driving force to create and maintain residencies based on the care the residents deliver. Unless we offer some alternative it will be very hard to impose limitations on numbers.

Senator KENNEDY. Just before we leave that point, do you favor as a national goal, limits on residencies in primary care to 50 percent?

Dr. LUGINBUHL. I favor an increase in the residencies in primary care and a limit on those in some of the specialty areas. I do not know what the figure should be, but I think 50 percent is a modest goal.

Senator KENNEDY. Modest goal. And who do you think ought to do that?

Dr. LUGINBUHL. Well, the problem with laying it on the medical schools as a condition of manpower legislation is that many of us do not directly control the hospitals with which we are affiliated and it becomes somewhat awkward to try to limit the residency in a hospital that is voluntarily affiliated with you.

I would think the condition should be layed directly on the hospitals and not through the colleges.

Senator KENNEDY. What about HEW?

Dr. LUGINBUHL. By "directly," I mean directly by HEW or through another mechanism, such as CCME.

Senator KENNEDY. Do you have a choice?

Dr. LUGINBUHL. I guess my choice would be to see if CCME is willing to do it. If they are not, I would turn to another mechanism.

Senator KENNEDY. You do not have strong views either way on that part?

Dr. LUGINBUHL. I do not have strong views on that particular choice.

Turning to the third issue, foreign medical graduate question. Obviously, my opinions are based on my assumptions that we will have adequate numbers of physicians and that problems are geographic and specialty distribution. I think a study showed that foreign medical graduates have the same amount of maldistribution as do our own graduates. They are not solving either of these problems. I feel that if we limit the number of residencies in this country, that will go a long way toward dealing with the foreign medical graduates problem. I also would favor removing preferential status for the immigration of physicians since I do not think there will be a physician shortage. I think the U.S. foreign medical graduates will present a special problem, and I probably do not have time to discuss it at this point.

My fourth topic is licensure provisions. The concept of Federal standards and voluntary program of implementation would have my endorsement. I think the voluntary approach is a preferable one in this case. I do feel that conventional licensure examinations may not correlate well with competency in medical practice. In any event we should continue our efforts to developing a more meaningful system of examinations that do actually correlate better with the quality of care delivered by the physician.

Finally, turning to the miscellaneous category, under that heading I will include facilities construction. Since I have said that I do not believe that we will need to expand medical schools further, I obviously cannot support facilities construction for enrollment increases.

I would on the other hand support facilities construction to improve education in primary care and family practice. Some of the special project areas, family practice and primary care, I would obviously support.

The AHEC I would support. The physician assistant training I think should be directed, as I said earlier, toward training physician assistants that would be hospital based, that can replace the residency programs that are phased out.

I do have some reservations about the concept of a financial distress as a long-term way of funding medical education.

In closing I would state that medical schools did not create all the problems in health care today and they do not possess the means of providing the definitive solutions to several of these problems. Some of the problems in my view will only be solved by more direct approaches dealing with payment mechanisms, and these are not part of health manpower legislation.

However, I do believe that health manpower legislation can play a part in solving some of the problems and indeed the specialty distribution problem will not be solved without appropriate manpower legislation. Thank you.

Senator KENNEDY. Thank you very much, Dr. Luginbuhl.

Could you talk for just a moment about your experience about getting the manpower into some of the rural communities, say in Vermont?

Have you experimented with different ways and techniques of attempting to deal with it, and what has been your experience, and are there any lessons that we can learn?

Dr. LUGINBUHL. We found it is very difficult to get single physicians, solo physicians, to go into a rural community and practice alone. The demands are 24 hours a day, 7 days a week.

They do not feel they can really deliver quality care.

On the other hand, if we can get two or more physicians with some appropriate paramedical people into a community, they find it a very rewarding system of practice.

We have spent a great deal of effort in Vermont developing a so-called problem-oriented system of care, that Dr. Weed of our faculty has developed. We find this system of organizing practice works very well in a rural community with groups of physicians. We have been



able to create with institutional funds one teaching practice in a rural community.

We are currently developing a second one, and we are in the planning stages of a third. I do think that by exposing students to this form of practice, well-organized, good-quality care, we will get students that will go into these areas in the future.

Senator KENNEDY. Senator Stafford.

Senator STAFFORD. Thank you, Mr. Chairman.

I want to again appreciate, or express my appreciation to the dean for coming down here and being a witness with us this morning.

On page 4 of your statement, Dr. Luginbuhl, you referred, or somewhere you referred to adverse effect of maldistribution of doctors where there are too many. I suppose an undue concentration of surgeons in a relatively rural area might lead to the situation you are talking about?

Dr. LUGINBUHL. Yes, sir.

We have done a study in Vermont, and we have correlated the rates of surgery with a number of different variables, and we discovered that with certain procedures the correlation is with the number of surgeons and apparently with nothing else, and I think there is some similar data from Maine.

I believe that Canadians have done comparable studies. This is the basis of my concern, that if you have too many physicians of the wrong kind, it may actually not improve the quality of care.

Senator STAFFORD. Would it be possible for you to supply the subcommittee with some of the studies that you referred to?

Dr. LUGINBUHL. Yes; I would be happy to submit them.

[The material referred to may be found in the files of the subcommittee.]

Senator STAFFORD. I ask this question somewhat facetiously, but again in connection with maldistribution of medical practitioners. I am not pointing at anybody or anyplace.

But has our experience in Vermont indicated that orthopedic surgeons seems to concentrate in areas where there are large ski developments?

Dr. LUGINBUHL. I am afraid that there is some need for orthopedic surgeons in ski areas.

Senator STAFFORD. With improving skiing equipment though, it may not be as great as it used to be?

Dr. LUGINBUHL. As a matter of fact, that is true.

Our faculty has done quite a lot of work on this topic and the incidents of injury have gone down rather dramatically. So everyone should come to Vermont and ski.

Senator STAFFORD. Thank you, Dean.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Luginbuhl follows:]



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SENATE HEALTH SUBCOMMITTEE HEARING  
October 30, 1975

Statement by William H. Luginbuhl, M.D., Dean  
University of Vermont College of Medicine

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## HEALTH MANPOWER LEGISLATION

Mr. Chairman and members of the Committee:

Before stating my views on some of the specifics of health manpower legislation, I wish to state my assumptions in four key areas that form the basis for all of my subsequent testimony. These deal with: 1) the adequacy of physician supply, 2) the dangers of excessive numbers of physicians, 3) my assessment of the major medical manpower problems, and 4) the likelihood of solving these problems by manpower legislation alone.

My first assumption is that the medical schools of the United States, based on their current enrollments, will produce adequate numbers of physicians to meet the needs of the American public. There is a growing body of evidence to support this conclusion. It is of particular interest to me that our neighbors in Canada have come to a similar conclusion and have decided to halt the expansion of their medical schools and the immigration of foreign medical graduates.

My second assumption is that excess numbers of physicians are not only unnecessary, but are actually disadvantageous. There is evidence that excess numbers drives up the cost of health care without improving the

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quality, and may actually impair the quality of care. Again, it appears that our neighbors to the North have drawn a similar conclusion in drafting their new health manpower policy.

My third assumption is that the major physician manpower problems of this country are related to the geographic distribution of physicians and the distribution of physicians by specialty. These problems will not be solved by simply increasing the numbers of physicians, but will only be solved by a more direct approach targeted on these specific problems.

Finally, point number four is that definitive solutions will require restructuring of economic incentives by altering the payment mechanisms for physician services, and that health manpower legislation will at best play a complementary role in arriving at these solutions.

In preparing this testimony, I consulted with both students and faculty. Through this process I have modified and strengthened my views. However, given the heterogeneity of both student and faculty attitudes, the views expressed are necessarily my own and not those of the institution that I serve.

Turning now to the specifics of health manpower legislation, I will group my remarks under the following five headings: 1) the problem of geographic distribution, 2) the problem of specialty distribution, 3) the problem of foreign medical school graduates, 4) licensure, and 5) miscellaneous.

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The geographic distribution of physicians is uneven, with relative scarcity in the inner cities and in many rural areas. This problem might be addressed by attempting to locate physicians permanently in these areas of need, or a less desirable alternative, a changing population of physicians on temporary assignment. Permanent location will require long-term economic and other incentives which are not under consideration today. Interim solutions would be patterned after the National Health Service Corps concept and are under consideration. Participation in such a Service Corps might either be mandatory for all students in exchange for subsidization of the education of all students, or as another approach, voluntary in exchange for financial subsidy of the education of those who volunteer.

In polling our students, I was surprised to learn that they were almost evenly divided between the options of mandatory universal service and voluntary service. It is my understanding that mandatory universal service is not under present consideration. I know that many view it as undesirable in this society in a time of peace. Therefore, if students are to serve voluntarily in exchange for financial support, the type of financial support must be specified; one option would be provision of capitation to the institutions with the students required to either pay back the capitation, or provide service. A second option would be scholarship support to the student in exchange for a commitment to serve. Our students rather strongly favored the latter.

Because of its importance to many schools, capitation deserves some discussion in its own right. In my view if capitation is small in amount



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and tied to many requirements upon the schools, many medical schools--particularly the schools from the more affluent states--will not participate. If capitation is higher, then an increasing number will participate. In any event, if scholarship money is available, with or without capitation, a high percentage of students will volunteer because of the high cost of medical education.

The problem of specialty distribution is one of inadequate numbers of physicians in primary care--particularly family practice, and too many in some specialty areas--notably surgery. Again, two approaches to this problem are possible: alter the economic incentives to make primary care and family practice relatively more attractive, and 2) impose limits on the numbers of funded residencies in different specialties. Probably both approaches will ultimately be needed, but the one appropriate to health manpower legislation is the imposition of limitations on numbers and kinds of residents. Again, it is interesting to note that Canada has used this mechanism.

Obviously medical students are not terribly happy with limitations on the numbers and kinds of residencies in that this limits their career options. Hospitals do not like such limitations because residents provide essential service in many settings. However, I do not think we can continue to train residents based on the need for the labor of the resident while in training as opposed to the need for the specialist after training. I would suggest that a provision of any manpower legislation include a special incentive grant program to encourage the

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training of physicians' assistants or nurse practitioners who would work in the hospital setting and do tasks now performed by residents. This would soften the termination of unneeded residency programs.

Affiliated hospitals object to having limitations placed on the number of residencies as a condition of capitation to the medical schools, pointing out that in many cases they are totally separate corporate entities. If limitations on the number of residencies are imposed directly through the medium of disallowing federal reimbursement for unneeded programs, then limitations imposed through capitation would be redundant in any event. Finally, a limitation on the number of residents would remove the most powerful incentive for the admission of unneeded foreign medical school graduates.

My views on the foreign medical graduate problem stem from my earlier assumption that we will have adequate numbers of physicians trained by our own medical schools and that our problems are those of geographic and specialty distribution. Studies have shown that foreign medical graduates tend to congregate in the crowded specialties and in the overserved, rather than the underserved areas. Therefore, their immigration should no longer be actively encouraged and the preferential immigration status should be withdrawn. A limitation on the number of residencies based on the number of American graduates would solve this problem. Service currently provided by FMG residents should be provided by a combination of U.S. graduates and hospital-based physicians' assistants and/or nurse practitioners.

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The U.S. foreign medical school graduates present a special problem. If one assumes that the number of opportunities for young people to become physicians is based on national need primarily and only secondarily on individual career aspirations, and that the numbers of places in American schools is currently adequate to meet our national needs, then special programs for the U.S. foreign medical graduates seem hard to justify. Although no one would question the right of U.S. citizens to study medicine abroad and to return to the United States if they meet the same standards as do graduates of U.S. schools, one does have to question their right to special status and special programs. In my opinion, special programs that encourage rejected applicants of U.S. schools to seek education in foreign schools should be rapidly phased out. If we wish to create more opportunity for U.S. citizens, then we should use the resources to expand U.S. medical schools, rather than provide these special programs.

Licensure provisions in the health manpower legislation include a mechanism for developing recertification to be followed by a voluntary program of implementation at the state level. This compromise I'm sure will be more popular than attempting to impose federal standards. I do believe that conventional licensure examinations leave much to be desired in determining actual competency in medical practice, and that recertification suffers from the same deficiency. Thus, I would hope that there would be included provisions to develop more meaningful examinations both for initial certification and for recertification.



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The miscellaneous category includes facilities construction, and special project grants. Since from the preceeding testimony it is evident that I do not support further expansion of enrollment, I can hardly support construction money to enable further expansion of enrollment to take place. Priority for construction money should go to facilities needed for the preparation of more primary care physicians, and thus deal with the specialty distribution problem.

Possible special project grants would include those for family practice and primary care, AHECs, physicians' assistants, and financial distress. The first two deal with specialty distribution and geographic distribution problems and thus seem justified. The training of hospital-based physicians' assistants to substitute for residents has been advocated above. However, I do question the need for the training of nonhospital-based physicians' assistants.

Finally, I would like to question the wisdom of continuing financial distress grants. At worst they may encourage bad management, and at best they suggest bad management. Admittedly, some medical schools, particularly private medical schools without a base of state support, cannot survive on present tuition and endowment income. However, since state schools are required to meet state needs in exchange for state support, it would seem reasonable that medical schools accepting federal money do so in exchange for special efforts to meet federal needs. For example, they might prepare physicians for the Armed Forces on a contract basis, or enroll a higher percentage of students participating in the National Service Corps type program.

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In closing, I would state that medical schools did not create all of the problems in health care today and they do not possess the means of providing definitive solutions to several of these problems. Some of these problems will only be solved, in my view, by more direct approaches dealing primarily with payment mechanisms, and these are not a part of health manpower legislation. However, I do believe that health manpower legislation can play a part in solving some of these problems and, indeed, the specialty distribution problem will not be solved without appropriate manpower legislation.

Senator KENNEDY. Thank you very much.

I am going to ask Dr. Marston, representing the National Association of State Universities and Land-Grant Colleges, and the American Association of Universities, to be our next witness. Dr. Marston has to catch a plane.

We are delighted to have you back, doctor.

**STATEMENT OF DR. ROBERT Q. MARSTON, PRESIDENT, UNIVERSITY OF FLORIDA, REPRESENTING THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES, AND THE ASSOCIATION OF AMERICAN UNIVERSITIES, ACCOMPANIED BY DR. WILLARD L. BOYD, PRESIDENT, UNIVERSITY OF IOWA**

Dr. MARSTON. Thank you, Mr. Chairman.

Accompanying me is President Willard Boyd of the University of Iowa, who will be available to help.

The Joint Health Policy Committee of the National Association of State Universities and Land-Grant Colleges/Association of American Universities in meeting yesterday adopted the following positions on selected issues in the comprehensive health manpower bill. The focus of these comments is on those aspects of the bill with overall implications for universities in general.

We recommend a 4-year bill of which the first year will be a simple extension of the existing legislation in view of the need for a transitional period to operation under the terms of a new law. Thereafter, the law should be operative for a full 3-year period. In this connection, we point out that the effects of any new legislation will, in fact, be continuously monitored and amendments can be considered well before 3 years have elapsed.

We stress the importance of continuing stable Federal support for schools of the health professions. This aid is vital, not only to these schools, but to the financial integrity of the entire university.

We recommend continued capitation. Should any significant changes, either in basic eligibility or category of eligibility emerge—and we do not recommend any such changes—it is essential for university purposes that such changes be implemented over a minimal 3-year phasing period.

The key issues concerning capitation are the conditions to be associated with it. We would speak at this time (1) specifically to the relation of capitation of geographical distribution, and (2) generally to the need in defining other conditions to provide alternatives in order to recognize the strengths and limitations among this very diverse group of schools.

We recommend that the National Health Service Corps be a major instrument for Federal assistance in meeting the needs of underserved areas. We do not see the need or the desirability of coupling this activity with capitation. However, if the Committee on Labor and Public Welfare finds it necessary to establish a binding relation between the two, we recommend two important principles.

First, that intrusion into the curriculum or the admissions procedures of the health schools be avoided on the fundamental ground that



society is best served if decisions on these matters are, as has been the case in this country made by universities and not by government. Thus, in addition to the problems which would be raised for health programs, we are equally concerned about: The precedent which would be set for other parts of the university and the fact that other groups outside the university would be encouraged to impose a variety of requirements, some of which might be conflicting, with respect to admissions and curriculum.

State and local governments, private donors, accreditation agencies, and others might consider this an invitation to insert themselves in decisions long and properly regarded as a university responsibility. Such external requirements could result in far-reaching consequences never intended by this committee.

Second, that in the initial years of operation under this bill, participation in the National Health Service Corps be voluntary. We believe that the National Health Service Corps, appropriately funded, will be oversubscribed by voluntary participation. Americans have traditionally been willing to assume social service responsibilities voluntarily, as evidenced by programs, such as the Peace Corps. Moreover, a National Health Services Corps program must be coordinated with the rapidly increasing State and local programs designed to meet the varying health care needs of the several States.

Should voluntary service and State planning prove inadequate to the task, consideration could then be given to a fair and equitable form of compulsory national health service. This might involve (1) agreement by all students admitted that they would serve, if required by national need, and (2) a lottery process to be held after admission to—but before entrance into—a particular health program.

If any national health service corps program is to be successful, there must be substantial and continuing Federal commitment in the form of financial aid to the student participants and capitation grants to the teaching institutions.

Educational institutions are experiencing serious fiscal difficulties. If these institutions are to prepare the health personnel the Nation needs, they require stable and adequate capitation grants.

Health education programs are not only a vital part of American universities but also a central element of our national resources for dealing with health problems.

Our committee and associations of universities are anxious to aid you in helping meet the Nation's health care needs.

Finally, Mr. Chairman, we will be having another meeting at the annual meeting of the National Association of State Universities and Land-Grant Colleges in Houston week after next, and if there are any particular matters that you would like this committee to address itself to, if you would let us know, then we would have an opportunity for further study at that time.

Thank you.

Senator KENNEDY. Do I understand on the voluntary program that you are talking about here is the program that is inspired by scholarship program, as expanded national health service?

Dr. MARSTON. Yes, sir.

I think we might quibble about the term "scholarship." I think probably one gets into the question of actually paying students during the time that they are in school and then they would be committed to a period of service after that.

Senator KENNEDY. And would you also consider if they fail to do that, there would be provisions to provide for double payback in terms of buy-out provisions?

Dr. MARSTON. The committee yesterday did not specifically point to that, because we focused very much on this key question of if there is a national need that is not met by voluntary participation that some mechanism that is equitable and spreads the risk across all students would be preferable to either placing the compulsory burden on institutions or the compulsory burden on a selected group of students.

This is the reason, with some concern, as you can imagine, that we arrived at the lottery process.

Senator KENNEDY. Let me ask this about whether there should be a national program to limit the residencies with the goal of 50 percent in primary care, implemented by HEW?

Could you tell us about that?

Dr. MARSTON. Again we spoke some to this, and I firmed this up later. However, the general sense was that when one gets into the whole question of foreign medical graduates and all of the other needs of specialty distribution, that some type of more orderly fashion of approach was necessary.

I am going to let my fellow president speak to this point. But I think the type of thing that we would want to examine, if you asked us to examine this further, is some mechanism to utilize nongovernmental advice, perhaps in the sense of some of the NIH councils, in which there would be constraints on Government action. And, as you know, that Director of NIH cannot make a grant unless it was recommended by nongovernmental group.

I think we would be willing to explore that kind of thing.

Senator KENNEDY. Could you explore that? This would be some kind of advisory group?

Dr. MARSTON. Some kind of advisory group, either existing or a new one.

Dr. BOYD. Senator, I think one of the things we are worried about in Iowa is how one determines for the whole Nation how care is delivered in particular parts of the Nation. We are anxious, and have been taking steps to increase primary care in Iowa. And we are very apprehensive that some of these groups, which are State supported, some of them are voluntary, might be in some way hindered by this program.

So we are very much interested in what we are able to do and continue to do that without stopping in that area.

I think, however, we are perfectly willing to recognize that we are a national resource; in fact, that is the problem, the feeling that we have been exporting too many. And under these proposals, there are only three underserved counties in Iowa, but there are 99 that think they are underserved. We are trying to work this out locally.



We would be willing and very happy to involve the private sector in these advisory discussions.

Senator KENNEDY. I think the extent that you can do some further thinking on that, about how that should be done, I think would be very interesting.

How about the limiting FMG's?

Dr. MARSTON. I was on the committee that made the report, publicly in favor of it. We felt yesterday that we should focus primarily on those areas of university concern. There was brief discussion at the committee, and we can followup further on that if you like.

In general, I find myself in sympathy with the directions of controls on FMG's, and I expect the committee would agree with that.

Senator KENNEDY. Let me ask Dr. Boyd, are you concerned that if we had the national objective of getting sort of 50 percent in primary care that State legislature in Iowa might say, well, this is Federal Government making this kind of decision and, therefore, let them back it up with the money and we will not be supporting the medical schools so much any more?

Dr. BOYD. To some extent. I would say we have, for example, in Iowa, in 1971 we had free family practice, and in 1977 we will have 150.

There are seven places in the State. These are supported, in fact, by hospitals themselves and in part by State government. This is based on personnel needs in that State.

Senator KENNEDY. OK.

I want to thank you.

Dr. BOYD. Could I just underscore just one point. That is, the spirit in which we present this is well understood. We are gravely concerned about the problems relating to the autonomy of the institutions with respect to admissions and curriculum.

As you well know, from a number of sources from State legislatures as well as Federal bodies, we are constantly faced with a number of legislative riders, proposals and so forth.

While we are very sympathetic to ends here, we are very concerned about the means.

Senator KENNEDY. Thank you very much.

Thank you, Dr. Marston.

We are going to recess for a few moments. I have to vote, and we will come back in 5 minutes.

[Short recess.]

Senator KENNEDY. We will come to order.

Our next witness is Dr. Philip Lee, former Assistant Secretary of Health, and former chancellor of the University of California at San Francisco, and presently the director of the health policy program.

It is nice to see you again. I appreciate your appearance here. I enjoyed your appearance before this committee a number of years ago, and appreciate very much your continued willingness to work with this committee on a variety of health issues. We are glad to see you here.



**STATEMENT OF PHILIP R. LEE, M.D., PROFESSOR OF SOCIAL MEDICINE; DIRECTOR, HEALTH POLICY PROGRAM, SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, ACCOMPANIED BY LAUREN LeROY, SENIOR RESEARCH ASSOCIATE, HEALTH POLICY PROGRAM**

Dr. LEE. Thank you, Mr. Chairman, I am delighted to be here in response to the committee's request to discuss the major health manpower issues of concern to the committee.

With me is Lauren LeRoy, senior research associate, working with me in the manpower area.

I will briefly summarize what I have said in the statement that I have submitted for the record, Senator.

I would also like to submit for the record some additional statements made with regard to foreign medical graduates, which will add to the material in my statement.

First of all, we need to develop an integrated health manpower policy that considers not only the issues which are before the committee at the present time, but the problems of NIH research training grants, which may have had an adverse effect on specialty distribution, on issues that we are now confronting; and the activities in the VA that relate to health manpower training. Although I know this committee does not have jurisdiction over the VA, there has got to be some overview of those activities as well as reimbursement under medicare and medicaid, which are also having an adverse effect on the problems of geographic and specialty maldistribution.

In the first area that is of concern to the committee, namely enrollment increases, I personally favor modest increases in enrollment for two reasons.

One, to provide equal opportunity, a policy that Dr. Ebert raised and, second, to assure an adequate physician supply in the future, it is prudent policy to continue as the Congress has in the past, providing incentives to the medical schools for modest enrollment increases. The wisdom of that policy is evident as we now look toward the future and the FMG question. Even if new policies result in a sharp decline in the number of FMG's we will have enough physicians to meet the country's needs.

On the problem of specialty maldistribution, which the Congress has not come to grips with prior to this time, I feel very strongly that there needs to be a limit on the total number of residencies. I would limit the number of first-year residency positions to 125 percent of the U.S. graduates by 1980.

Last year, I suggested the limit should be 110 percent, but I think that a restriction to 125 percent is probably more reasonable. If that restriction is imposed, it will not, in fact, reduce the number of first-year residencies that are currently available.

Second: I think there should be a restriction on the residences that would require 50 percent of them to be in primary care specialties. I

would define those specialties as only general internal medicine, general pediatrics, family practice, or general practice.

I would not include in that 50 percent, the specialty of obstetrics and gynecology, even though these physicians provide a good deal of primary care. If the committee wished to include obstetrics and gynecology, you should raise the figure of primary residencies from 50 to 57 percent of all residencies.

I do not believe that either of these restrictions will be imposed voluntarily.

The AMA, in its testimony earlier, indicated we were reaching that level—50 percent in primary care—and there was no problem, and there did not have to be any Federal interventions or regulations.

I think that 40 years of experience in terms of what has happened to residency training indicates the problems will not be resolved by the newly established Coordinated Council on Medical Education, by the Liaison Committee on Graduate Medical Education, or by any other mechanism on a purely voluntary basis.

Senator KENNEDY. Would you have HEW do it?

Dr. LEE. I would have a combination of HEW and the Coordinating Council on Medical Education do it, if the council would cooperate.

Senator KENNEDY. HEW would have final authority?

Dr. LEE. HEW would have final authority, using its authority to reimburse hospitals for the services provided by interns and residents as the means to enforce the decisions, HEW would not reimburse the hospitals for those residencies where the numbers were considered to be in excess of those that were considered appropriate. For example, a hospital would not receive reimbursement where there were excess surgical residencies or excess subspecialty residencies in various fields. The ultimate clout rests with HEW in its reimbursements.

Senator KENNEDY. On this 100, 110, 125 percent, can you just run that by me again, why shouldn't it be 100 percent.

Dr. LEE. First, should Congress restrict first-year residency positions to 100 percent of U.S. graduates, there would be no opportunity for students from other countries to come here for training.

Second, there would be little flexibility or no choice in terms of U.S. graduates. I think that would be too restrictive. Obviously 110 percent is more restrictive than 125 percent.

The reason that 125 percent makes some sense to me is that if you set that figure for 1980, you will not, in fact, reduce the number of first-year residencies that are currently available.

Without some restriction, our present problems would persist. Let us take New York City as an example. There are a number of hospitals in New York City that have 50, 60, 70 percent foreign medical graduates in their residency programs. In order for those positions to be filled by U.S. graduates, there needs to be a restriction on the number of other positions available. If you had unlimited number, if there were no restrictions on the total number of residencies, U.S. graduates would never go into those hospitals.

If Congress restricts the total number, then U.S. graduates will accept positions in urban hospitals where there are now FMG's. If Congress does not put that ceiling on them, that is not going to happen, even though you increase the number of residencies in primary care. There is going to be too much choice. They will not go to those less desirable hospitals.



On the question of whether the medical schools should also be required, school by school, to have 50 percent of their residencies in primary care, I think ultimately that should be done. I think that is going to take at least 5 years rather than 3 years.

If you take a school like Yale, it has only 25 percent of its residencies in primary care, it cannot within a year or two suddenly shift that, affiliate with a number of hospitals and have 50 percent of its residents in primary care within 3 years. I think they could within 5 years. I think that is a sound policy.

A medical school has relatively little control over the residencies in affiliate hospitals. It is department chairmen, the hospitals, and the residency review committees that determine what hospitals will have what kind of residencies. This means that a national mechanism to control residencies, in addition to your effort to get each school to do it, will be required.

I do not think doing it on a school-by-school basis will be sufficient.

On the issue of geographic maldistribution, the problem is access to care. Health manpower legislation is principally concerned with availability of physicians. That does not assure access to care.

To deal with the issues of geographic maldistribution Congress should adopt a dual strategy, one for rural areas and one for urban areas.

The basis for the rural strategy would be a large-scale expansion of the National Health Service Corps, strong support for the area health education centers, and strong support for family practice residencies, because family doctors will practice in small towns, 1,000 to 10,000 people. Internists and pediatricians, although they are primary care practitioners, simply do not settle in rural areas.

Medical schools have to give greater consideration to students from rural areas, more than they have in the past, and students from underserved urban areas. With the kind of support that there has been for scholarships for low-income students, including for minority students, a very significant improvement in the number of black students, Chicano students and others from underserved populations has occurred in the past 5 years.

Continued support for those programs is needed, and more consideration for students from rural areas must also be included in the admissions criteria.

Remote site training is also needed, although this is helpful principally as a means of preparing students who are going into National Health Service Corps to be able to provide the kinds of services that are needed.

Finally, as part of the rural strategy, continued Federal support for nurse practitioners and physician-assistant training programs is needed.

A number of examples of excellent nurse practitioner or PA training programs can be cited. Some have been run by rural practitioners on their own or with remote connections with universities, while others have been primarily in university medical centers. Many of these have been of outstanding service in meeting the needs of rural areas.

On the urban strategy, the first and most important action is restricting the number of residencies and increasing the percentage of residencies in primary care.



Medical schools are playing a key role in meeting urban health care needs. Of the cities with populations over 900,000 people, 90 percent have a medical school and they have university-affiliated hospitals. Every city with over 500,000 people has a teaching hospital or more than one teaching hospital.

These hospitals and medical schools can be given support to develop outreach programs extending from their present emergency rooms and outpatient clinics into the community, they can meet the needs of underserved neighborhoods with a network of services, with backup support, with use of nurse practitioners or physician assistants as appropriate in a way that would not be as feasible merely by a large-scale expansion of the National Health Services Corps.

We are extending some studies that Senator Javits had initiated by Dr. Bantan, looking at primary care residencies. We hope within the next few weeks to have data on all those residencies in every hospital in every urban area. If you are still looking at the problems, we will obviously provide you with that data.

Two things have to be mentioned in addition. The transportation problems cannot be ignored. They are critical in the rural areas. They are critical in the urban areas.

If there is some way that in the manpower legislation Congress could include some provision for funds for transportation to provide people with access to needed care it would help solve a critical need. In many studies of health care in rural areas, this is one of the critical barriers to access. The same is true with urban areas where lack of public transportation has been a major barrier to access.

Finally, on the foreign medical graduates, I would strongly support the need to require foreign medical graduates to meet the same examination requirements, and I mean exactly the same requirements as U.S. graduates. The examination could be part I and part II of the National Board or equivalent examinations that both meet. In addition, the FMG should be fluent in English, and have demonstrated competence in both basic sciences and clinical medicine.

Finally, before closing, I would just like to say a word about the needs for adequate health manpower data to be collected by the Federal Government. That was included in legislation that you introduced last year, Senator Kennedy, and I would very strongly support that.

Without that, the kind of studies, the kind of analysis that is required for sound policy decisions by the Congress will not be done. Such studies are dependent on the sources of data. Data is not available that is needed. The National Center for Health Statistics or other Federal agencies could be given the mandate and the means to collect needed health manpower data.

Just in a final comment about responsibility. It just is not the medical schools any more. They were responsible for increasing enrollments, and they did an outstanding job. They were responsible for increasing the minority student enrollments, and they have done well, but not quite as well as they should.

To deal with geographic maldistribution, to deal with specialty maldistribution, requires other participants including the Federal Government if the problems are going to be dealt with effectively.

Thank you very much.

Senator KENNEDY. You have been very helpful. I do not know whether we can do all the things you suggest in this legislation, but I would certainly like to see it achieved.

Let me just more specifically ask you about the numbers of primary care residents.

Do you favor them as far as national goal of 50 percent in primary as you define them?

Dr. LEE. Yes.

We estimate, Senator, now about 37 percent to 38 percent of the residents are in those three specialties, and by far the most significant of those is internal medicine.

Senator KENNEDY. You do that through HEW, is that right, working with the Coordinating Committee?

Dr. LEE. The review of the residencies has to be done or should be done by residency review committees. The policy on establishing 50 percent as the minimum—that is the minimum, not the maximum—should be done as a cooperative undertaking by HEW and the Coordinating Council if the Coordinating Council will cooperate.

If not, HEW should set up a separate mechanism.

Senator KENNEDY. What about some minimum standards for licensure and recertification?

Dr. LEE. We have not analyzed that area in any detail, but I think some experiment, some demonstrations in that regard could be very beneficial in terms of helping future policy decisions as to whether there should be a single national licensure, and certainly the same thing is true in recertification.

I would start with demonstration grants, with more research in that area, with more opportunity for development of possible national standards, and then see how those are accepted, rather than establishing that by law at the present time.

Senator KENNEDY. Grants to States that would be willing to do it?

Dr. LEE. Grants to States, and groups like the National Board of Medical Examiners.

Senator KENNEDY. How about the scholarship program with 50 percent of the students and the requirements that they serve or otherwise buy out provisions?

Would you support that?

Dr. LEE. I do not believe that you have to require as a condition of capitation grants to medical schools that the student sign up for the National Health Service Corps. If scholarship funds are available, the students will sign up. That is obviously a personal opinion. Nobody can say whether they will or they will not.

The second is the duration of the payback. I feel that for a physician who is working in an area where he or she is not going to practice, that the 4-year payback beyond residency is more than should be required. A 2-year payback under those conditions would be appropriate and probably adequate if the numbers are sufficient to meet the needs.

Again, that is a personal view, and I think many students would accept a year-for-year payback without any question.

Senator KENNEDY. Thank you very much, Dr. Lee. You have been very, very helpful.

Dr. LEE. Thank you.

[The prepared and additional statement of Dr. Lee follow:]



STATEMENT BY  
PHILIP R. LEE, M.D.\*  
BEFORE THE  
SUBCOMMITTEE ON HEALTH  
OF THE  
COMMITTEE ON LABOR AND PUBLIC WELFARE  
UNITED STATES SENATE  
NINETY-FOURTH CONGRESS  
OCTOBER 30, 1975

Mr. Chairman and members of the Subcommittee on Health. I appreciate the opportunity to discuss the major health manpower policy issues currently facing the country. Having held extensive hearings last year and again this year, the Committee is well aware of the complexity of these questions.

This year, more than ever, I think the complexity of the problems is appreciated. The relationship of health manpower policies to those affecting health care organization and financing, the relationship of these to the economy in general and specifically to the availability of public funds for the support of social programs are more and more apparent.

The primary purpose of health manpower policies is to assure an adequate supply of the appropriate kinds of health personnel to provide needed health services. Increasing federal involvement in health manpower development, health care financing, health planning and the regulation of the health care system has not achieved this goal. In recent years it has been increasingly recognized that many of our problems in health care relate to primary care. There are three questions that must be asked

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that relate to primary health care and health manpower policies:

- What can and should be done to establish and maintain an adequate supply of primary care practitioners? What should be the roles of U.S. medical school graduates, foreign medical school graduates, nurse practitioners and physicians' assistants?

- What can and should be done about present patterns and trends in the distribution or mix of specialists?

- What can and should be done to locate and support primary care practitioners where they are needed to assure more equitable access to care?

In order to discuss these questions within the context of federal health manpower policies, I will briefly review the evolution of the federal role in support of health professions education and then briefly describe the current federal policies in the financing of health care, in health planning and regulation and in biomedical research that affect the supply or demand for health professionals. I will then discuss the problems of improving access to health care services, creating a more desirable distribution among specialties, and, finally, the role of foreign medical graduates in health care. Although important, I will not deal with the issues related to licensure of physicians and other health professionals or their recertification.

The past 15 years have seen an unprecedented growth in the health care system - growth in employment, in utilization, scope of services and in costs. The next 15 years are likely to present quite a different pattern of change. Instead of shortages, there may be an oversupply of nurses and other health professionals in relation to demand for services and employment and employment opportunities. The state of the economy is likely to be the most

significant factor in the acceptance or non-acceptance of nurse practitioners and physicians assistants. In addition to the state of the economy, there are many competing demands for the available federal and state dollars that can be allocated for social programs. Social Security, public assistance, food stamps, education and pollution control all represent compelling and, in a sense, competing demands for limited funds.

#### The Growth of the Federal Role in Health Manpower, Health Care and Health Planning

In the past ten years, federal health manpower policies have emphasized increasing the number of graduates of U.S. medical schools and other health professions schools, increasing opportunities for members of minority groups and other financially disadvantaged students, and insuring the financial stability of these institutions. Although the Congress has authorized support for medical, osteopathic, dental, pharmacy, veterinary medical, optometry, podiatry, public health, and nursing schools, I want to address myself to the issues related to physician manpower. I recognize that this is only a limited part of the problem, but I believe that unless the major issues related to physician manpower are resolved, it is unlikely that the others can be resolved.

Health professions education in the United States is a large, complex and costly enterprise. In 1972, the health professions schools spent more than three billion dollars in the education of more than 300,000 students. Less than 40 percent of their income was from unrestricted educational funds.

Schools of medicine accounted for 63.2 percent of total expenditures by all health professions schools 21.9 percent of total expenditures can be attributed to nursing, which represents two-thirds of all health professions schools, while dentistry accounted for 6.4 percent, pharmacy for 3.6 percent and the remainder of the schools for less than five percent of total expenditures.

During the past ten years the rapidly rising costs of health professions education have been accompanied by a growing federal commitment to health manpower development. The Department of Health, Education and Welfare (DHEW) estimated that expenditures, exclusive of those for research training and mental health, had grown from \$65 million in 1963 to \$536 million in 1973. Between 1963 and 1973 a total of \$3.4 billion was allocated for the training of health professionals. In 1973 alone, total DHEW obligations to health professions schools amounted to approximately \$1.6 billion. Of this sum, 47 percent was for biomedical research, 36 percent for institutional support and student assistance, 15 percent for research training and two percent for other activities.

Because of the high costs of medical education, the federal government has now become its major financial supporter. Federal funds to U.S. medical schools account for approximately 45 percent of their current revenue. (Table 1)

Table 1

SOURCES OF FINANCIAL SUPPORT FOR U.S. MEDICAL SCHOOLS 1972-1973  
(millions of dollars)

| Source                            | Dollars                    | Percent of Total |
|-----------------------------------|----------------------------|------------------|
| Federal Funds                     | 946.4                      | 44.8             |
| Non-federal Grants and Contracts  | 369.1                      | 17.5             |
| Tuition and Fees                  | 90.5                       | 4.3              |
| Endowment Income                  | 47.0                       | 2.2              |
| Medical Services Funds            | 146.3                      | 6.9              |
| State Appropriations              | 316.4                      | 15.0             |
| State, City, County Grants in Aid | 33.2                       | 1.6              |
| Gifts                             | 22.3                       | 1.1              |
| Teaching Hospitals and Clinics    | Combined in<br>other terms | ---              |
| Other                             | 139.2                      | 6.6              |
| Total                             | 2,110.4                    | 100.0            |

SOURCE: American Medical Association, Division of Medical Education. *Journal of the American Medical Association*: Anne Crowley (ed.) 231:Supplement, 1975, p. 28.



Medical schools receive the lion's share of federal funds because of their research activities and the high cost of medical education. Net education expenditures per medical student are not only the highest of any health profession but are double the annual cost per student of a pharmacy education and more than three times the annual cost of baccalaureate nursing.

The federal government has become a major source of support for the training of virtually all types of health manpower, particularly the major health professions. This involvement has increased substantially in the past decade. Although the majority of federal funds for health professions education comes from the Public Health Service, a variety of federal agencies, including the Environmental Protection Agency, the Social and Rehabilitation Service and the Appalachian Regional Commission, have provided support for research, training, and construction.

The Department of Defense (DOD) and the Veterans Administration (VA) have become involved in health manpower training as a means to provide staffing for their medical facilities. (Table 2) In the past, DOD has relied on scholarships

TABLE 2

OUTLAYS FOR HEALTH MANPOWER TRAINING,<sup>a</sup> SELECTED AGENCIES, FISCAL YEARS 1969-74  
IN THOUSANDS OF DOLLARS

| Agency                                      | 1969      | 1970      | 1971        | 1972        | 1973        | 1974*       |
|---|-----------|-----------|-------------|-------------|-------------|-------------|
| Total                                       | \$717,271 | \$866,855 | \$1,009,422 | \$1,103,228 | \$1,214,280 | \$1,385,397 |
| Department of Health, Education and Welfare | 471,806   | 556,869   | 609,415     | 683,411     | 741,906     | 800,646     |
| Bureau of Health Manpower Education         | 133,694   | 189,044   | 234,811     | 279,200     | 382,852     | 437,323     |
| National Institutes of Health               | 183,182   | 190,055   | 181,157     | 179,170     | 135,387     | 162,375     |
| Other HEW                                   | 154,930   | 177,770   | 193,447     | 225,041     | 223,667     | 200,948     |
| Department of Defense                       | 120,468   | 80,220    | 134,680     | 116,298     | 130,869     | 216,181     |
| Veterans Administration                     | 77,456    | 95,037    | 106,790     | 124,097     | 145,775     | 168,328     |
| Other Agencies                              | 47,541    | 134,729   | 158,537     | 179,422     | 195,730     | 200,242     |

a. Excluding outlays for construction at health professional schools

Source: Russell, Louise; Bourque, Blair Bagwell; Bourque, Daniel and Burke, Carol; Federal Health Spending 1969-74; Washington, D. C.; National Planning Association, Center for Health Policy Studies; August 1974; p. 42.

tied to military service to accomplish its goal, but it now is involved directly in medical education with the establishment of the Uniformed Services University of the Health Sciences. The VA has concentrated on support of internship and residency training and clinical instruction for nurses and allied health personnel in anticipation of retaining these practitioners in its institutions. Recently it has been granted authority and funds by Congress to directly support the establishment of new medical schools and the expansion of existing schools as part of its contribution to meeting the nation's need for physicians.

The three principal agencies within DHEW which support the training of health manpower are the Health Resources Administration (HRA), the National Institutes of Health (NIH), and the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA). The major portion of funds for institutional support and student assistance is provided by HRA. In conjunction with its research activities, NIH supports the majority of research training and fellowship programs. Training programs for undergraduate medical students related to mental health, as well as psychiatry residencies, training of psychiatric nurses and instruction for mental health professionals and paramedical personnel are supported by ADAMHA. Although not earmarked for health manpower training, the federal funds expended for biomedical research and reimbursement for Medicare and Medicaid beneficiaries (roughly 21 billion dollars in 1974), fund a substantial portion of faculty salaries, residency training or fellowship programs.

Federal expenditures for health manpower training have increased at an accelerated pace in the past decade. There was nearly a twofold increase in federal outlays for all health professions education between 1969 and 1974 with expenditures for nursing and physician training growing by over 100 percent. (Table 3) With national agencies now assuming approximately 45 percent of the costs of medical education and a sizeable portion of support for the other health professions, federal policy makers are demanding that these institutions be re-

sponsive to national health priorities.

Table 3  
OUTLAYS FOR TRAINING AND RELATED CONSTRUCTION IN CURRENT DOLLARS, BY TYPE OF TRAINING,  
FISCAL YEARS 1969-74  
IN THOUSANDS OF DOLLARS

| Outlays                    | 1969      | 1970      | 1971        | 1972        | 1973        | 1974*       |
|----------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| Total                      | \$804,992 | \$968,828 | \$1,120,344 | \$1,262,289 | \$1,416,486 | \$1,596,561 |
| Training                   | 717,271   | 866,855   | 1,009,422   | 1,103,228   | 1,214,280   | 1,385,397   |
| Research personnel         | 209,909   | 220,808   | 214,898     | 219,045     | 164,104     | 184,867     |
| Physicians                 | 169,584   | 185,036   | 224,780     | 269,007     | 317,725     | 407,172     |
| Dentists                   | 28,450    | 28,408    | 45,476      | 59,139      | 67,645      | 81,720      |
| Nurses                     | 60,539    | 71,884    | 80,496      | 95,482      | 128,819     | 127,243     |
| Other health professionals | 117,190   | 145,686   | 165,373     | 193,903     | 249,463     | 291,268     |
| Non-degree                 | 131,599   | 215,033   | 278,399     | 266,652     | 286,524     | 293,127     |
| Construction               | 87,721    | 101,973   | 110,922     | 159,061     | 202,206     | 211,164     |

Source: Russell, Louise; Bourque, Blair Bagwell; Bourque, Daniel and Burke, Carol; Federal Health Spending 1969-74; Washington, D. C.; National Planning Association, Center for Health Policy Studies; August 1974; p. 43.

What has been the result of this investment of federal funds? The most obvious result has been increased enrollment and a growing number of graduates. By 1980, the annual output of the nation's medical schools will reach nearly 16,000 graduates, almost double the number in 1960. The increasing supply of U.S. medical school graduates has not, however, significantly increased the percentage of physicians in training in primary care specialties, nor has it improved the geographic distribution of physicians.

The geographic distribution of physicians and other health professionals has remained relatively immune to federal health manpower policies, while federal policies related to reimbursement of physicians under Medicare and Medicaid has, if anything, aggravated the problem. While federal health manpower provisions to improve geographic availability of physicians and other health professionals have focused on loan forgiveness, fewer than one percent of the 170,000 students provided loans have taken advantage of the loan forgiveness option which requires



them to practice in underserved areas. A more recent approach -- embodied in the National Health Service Corps scholarship program -- of requiring students to agree to provide service before receiving financial assistance has indicated greater potential for achieving its goal. This suggests that the availability of a loan during medical school has a higher value for the medical student than forgiveness of the loan after medical school.

Because health manpower is such an integral component of the health care system, there are few policies intended for other aspects of the health care sector which will not impact on health manpower as well. In some instances, the linkages are obvious; while in others, they may be less apparent. It is imperative that health policy and, in this instance, health manpower education policy is considered within a framework which recognizes the complex interactions between the various aspects of health care system. Policies to solve health manpower problems cannot be divorced from policies related to the organization, financing and delivery of health care services.

The immigration laws and regulations of the Justice and State Departments have been instrumental in encouraging the large influx of foreign medical graduates into the United States in the past decade. Combined with the Department of Labor's determination of a nationwide physician shortage in 1965 and the advent of Medicare and Medicaid reimbursement of hospitals for services provided by resident physicians, these policies have fostered the establishment of residency training positions far in excess of those required by graduates of U.S. and Canadian medical schools. These vacant positions have been filled by increasing numbers of foreign medical graduates, the majority of whom remain to practice medicine in the United States.

Federal support for biomedical research and research training in medicine has had a negative impact on the distribution of specialties. The research emphasis of medical school faculties has encouraged students to specialize. In many insti-

tutions, research training grants have been used to support residencies in medical and surgical subspecialties. Upon completion of these programs, many individuals have chosen to practice subspecialty medicine rather than to pursue research careers.

More positively, federal funds have contributed to the development of family practice residencies in the last few years, with approximately one-third of the approved residencies currently receiving direct federal grant support. However, it must be recognized that family practice residencies represent less than two percent of all approved residencies at the present time.

Federal provisions to insure equal educational opportunities for minorities and other socio-economically disadvantaged students have significantly increased the enrollment of these individuals in the nation's health professions schools. The number of women enrolled in medical schools has experienced more than a three fold increase since 1965. Minority medical students have more than doubled in number since 1970. The number of health professions students receiving financial assistance grew from 11,554 in fiscal year 1965 to a peak of 31,000 in fiscal year 1972 to an estimated 29,000 in fiscal year 1974.

Reimbursement for physicians' services under Medicare and Medicaid is not structured to encourage improvements in the health care delivery system. At the present time, Medicare determines physician reimbursement according to the "customary charges" or "prevailing charges" of physicians. An individual physician's customary charge is the fee he or she establishes for a specific service, such as a routine office visit or hospital visit. Prevailing charges are the average fees set by physicians in a defined geographic area. Present reimbursement policies favor specialists rather than generalists, surgical procedures rather than general medical care and urban rather than rural practitioners. Altering these policies to reduce the urban/rural inequities of current payment schemes would provide economic incentives for greater numbers of physicians to choose to practice in

medically underserved areas. Equalizing the status of primary versus specialty care, by increasing reimbursement for ambulatory care services, would further induce physicians to enter primary care and allow graduate training programs to receive similar support for their primary care residents as they currently enjoy for residents in specialty services.

Introduction of a national health insurance scheme will further extend federal involvement in the payment for health care services. The inequities of current federal reimbursement mechanisms must be corrected so as not to perpetuate the current incentive structures in a national program. The enactment of some form of national health insurance by 1980 seems probable. The scope of whatever program is authorized will in all likelihood increase the demand for physician services. Initiation of policies to address the problems of physician supply and maldistribution thus becomes even more pressing.

Federal policies which appear to have a less direct relationship with the training of health manpower are likely to influence the demand for care, the supply of health professionals and the distribution of resources. The Social Security Amendments of 1965, which included Medicare and Medicaid, exemplify this type of legislation. In the 1960's, bills to establish neighborhood health centers, community mental health centers, regional medical programs and comprehensive health planning agencies all affected the distribution of health manpower and demand for their services.

The Social Security Amendments of 1972 (P.L. 92--603) have the potential to profoundly influence health manpower requirements and the quality of care provided by both individual practitioners and institutions. These amendments require the establishment of Professional Standards Review Organizations (PSROs) to "promote the effective, efficient and economical delivery of health care services of proper quality" by assuring that services for which payment is made under the



Social Security Act are medically necessary and rendered in the most appropriate setting and time periods. Although Congress expects PSROs to help contain the costs of medical care, raising quality standards in some instances could increase costs and the demand for more specialized medical manpower. Moreover, it is not clear whether more efficient care will reduce the demand for physicians and other health professionals or perhaps have the opposite effect. It is too early to project the impact of PSROs on health manpower needs, but their potential role is obvious.

Finally, the recently enacted National Health Planning and Resources Development Act (P.L. 93--641) also has the potential to significantly affect health manpower planning. Section 1502 of the law cites ten national health priorities for planning and resources development, each of which will impact to greater or lesser extents on health manpower requirements. First on the list of goals is "the provision of primary care services for medically underserved populations, especially those which are located in rural or economically depressed areas." Achievement of this goal requires changes in federal health manpower policies as well as those in health planning, health facilities construction and the financing of health care.

The nation's health manpower problems cannot be resolved effectively on a local or state basis. They cannot be remedied by private actions alone; and they do not belong within the context of the "New Federalism" that emerged as a basis for much domestic social policy during recent years. The federal government has a responsibility to provide leadership in the resolution of national health manpower issues. Revenue sharing and initiatives by state and local governments are essential to alleviating certain domestic problems, but others, including those related to the education

of physicians and other health professionals, the mix of specialists and the geographic distribution of physicians cannot be resolved within that framework.

Health manpower policies have multiple purposes, but ultimately their goal is to assure an adequate supply of the appropriate kinds of health personnel to provide needed health services. There are at least five health manpower areas in which federal action can contribute to correcting current inequities and to assuring greater accessibility to available health services:

1. Develop an adequate number of well-trained health professionals to meet expected demand -- with full consideration given to the roles of U.S. medical graduates, foreign medical graduates, nurse practitioners and physicians' assistants;
2. Increase the absolute number of primary care physicians and their proportion in relation to consulting specialists;
3. Decrease the present inequities in the availability of medical services to rural and low income urban populations;
4. Expand opportunities in the health professions for women, minorities and students from low income families;
5. Improve the productivity of physicians, particularly through greater and more efficient use of nurse practitioners and physicians' assistants.

Although changes in third party reimbursement schemes are essential to remove the disincentives for providing primary care, practicing in underserved urban and rural areas and utilizing nurse practitioners and physicians' assistants, Congressional action to modify federal insurance mechanisms falls outside the authority of health manpower training legislation.

Any attempt to develop alternative health manpower policies faces many difficulties and uncertainties. The poor

quality of available data precludes definitive analysis in a number of critical areas. Present uncertainties with respect to federal policies regarding foreign medical graduates and national health insurance make it impossible to predict, with an acceptable degree of accuracy, the future supply of or demand for physicians. Congressional action cannot await perfect information upon which to base intelligent decisions. Failure to correct the problems currently facing us will only further aggravate existing inequities in the delivery of health care.

In examining future policy choices, it must be recognized that the medical school is only one of a number of institutions or agencies which must respond if legislative objectives are to be achieved. The increased medical school enrollments of the past decade resulted primarily from actions taken by medical schools in response to federal initiatives. Present patterns of graduate education and specialty distribution were not, however, derived from medical school policy alone but are the consequence of actions by a host of professional organizations, hospitals and government agencies which must all be included in correcting existing deficiencies. Provisions to control the immigration of foreign medical graduates and to guarantee their competence will also require involvement of several government agencies and professional groups. The issue of geographic maldistribution remains the most perplexing to successfully resolve. Actions to improve the accessibility of health care services stretch far beyond those traditionally associated with the health care system. Even within that system, a multi-faceted approach seems essential. We have identified



some areas in which we feel medical school involvement could make a significant contribution. Other aspects of the problem require a major commitment by several federal agencies.

Improving Access to Health Care Services

The inequitable access of patients to health care services is often attributed to the geographic maldistribution of physicians and other health personnel. The uneven distribution of physicians throughout the geographic areas of the United States is a basic cause of inaccessibility of health care services to large segments of the population. The issue, however, is more complex than the question of geographic maldistribution, and its resolution requires accompanying changes in many areas besides health manpower training.

Policy development designed to achieve an equitable distribution of health care services throughout the nation must distinguish between the concepts of availability and accessibility. The fact that resolution of the problems associated with each requires very different actions may be overlooked if both are conceptualized as the single issue of geographic maldistribution. The availability of services is a prerequisite to their utilization. At the same time, if the patient's ability to gain access to available services is restricted by any one of a number of factors, increasing the availability of health professionals only partially improves the situation.

Adequate access can be defined simply as the ability of an individual to obtain basic health care services without unusual difficulty. Factors which constrain accessibility appear in a multitude of combinations whose significance cannot be generalized for all populations. For this reason, barriers to access will not be removed by a uniform strategy for all "underserved" areas.

In order to identify underserved populations or to evaluate the success of programs to improve geographic distribution of services, there is a tendency to quantify variables affecting access to care. Depending on the variables considered -- physician/population ratio, distance to physician's office, transportation time, financial status -- different population groups will be identified as underserved. The present criteria for National Health Service Corps site approval include a primary care physician to population ratio of less than 1/4000. This model thus precludes qualification of most inner city areas. Development of appropriate criteria to account for the varying factors which affect access to care for different segments of the population is essential. By pointing out the unique characteristics of given underserved population groups, this process may also suggest different strategies to address the problems each encounters. Responding to the needs of a given population group and its difficulty in obtaining health care services requires that the attributes specific to that group be taken into account.

At a general level, the distinction must be drawn between urban and rural underserved areas. The degree of variability among populations within each category must not be minimized, but there is a set of characteristics which broadly applies to each. Obstacles to obtaining care in urban and rural underserved areas are traditionally revealed in the literature as disincentives for health professionals to locate in those areas. For rural areas these include heavy patient loads for practitioners, the unavailability of other professional colleagues, including those with specialty expertise, shortage of allied health personnel, inadequate laboratory and radiologic facilities, inadequately staffed hospitals, lack of health insurance coverage and a paucity of means of



transportation. The inner city presents a different set of obstacles including widespread poverty, communication barriers between practitioner and patient, red tape requirements for receipt of third party reimbursement, shrinking tax base to support health care services and the socio-economic problems of ghetto life.

Within either geographical context, a variety of factors will influence a particular population's use of health care services in relation to its needs. The inaccessibility of physicians in both urban and rural areas is more often a function of inadequate transportation than geographic isolation. A thirty mile distance between the location of the nearest physician and the majority of residents in a rural area places minimal constraints on accessibility for those who own an automobile. To those who must rely on inadequate or costly public transportation, this same distance means deprivation of physician services. Distance is obviously not the critical factor limiting access to physician services in the inner city, but lack of adequate public transportation may be.

It should be stressed that proximity to available services is a greater problem for primary care than for secondary or tertiary care.

The National Advisory Commission on Health Manpower reported in 1967 that only one-tenth of one percent of rural populations had to travel more than 50 miles to a hospital. In urban areas, none of the population was found to be more than 10 miles from a hospital. Bearing in mind the variations in quality among hospitals, distance to at least a minimal level of care for serious illness or injury would appear to be prohibitive only when coupled with poor weather or road conditions or natural geographic barriers. Access to and utilization of primary care services

are more quickly affected, however, by the distances one must travel and the length of time it takes to reach the physician's office and to wait for treatment.

The most commonly acknowledged factor inhibiting utilization of health care services is the financial barrier. The Medicare and Medicaid programs have improved accessibility to all levels of health care for many. However, such problems as inadequate benefits provided by many state Medicaid programs, emphasis on inpatient care, coinsurance and deductibles, limitations on physician reimbursement and severe financial restrictions on eligibility continue to constrain utilization and to deny access to private, "mainstream" medical care. Moreover, the advent of Medicare and Medicaid, with their promise of one standard of care for all, has contributed to a critical underfinancing of public systems of care -- municipal and county facilities -- which have traditionally provided services to the poor and near poor. Large segments of the urban poor continue to be dependent on these hospitals which are often strained to the limit in meeting the demand for health services.

Lack of insurance coverage is only one of several financial barriers to care. The inability to pay for transportation or child care, as well as the inability to take time off from work to consult a physician, are critical factors in the decision to seek or not to seek care. There are also the more subtle socioeconomic factors often associated with poverty such as lack of information about available services and fear or ignorance of the multiple bureaucracies which must be surmounted to obtain care.

The characteristics of a particular population also affect the willingness

of consumers to seek health care. The patient's social or cultural definitions of illness will influence his or her perception of the need for or appropriateness of health services for various conditions. The individual's knowledge about health care and the importance one places on preventive or health maintenance services vary among populations of different socioeconomic status. The communication barrier created by a patient's inability to speak English serves as a major deterrent to seeking all but acute care services. The gravity of each of these factors in inhibiting access to care is compounded when they affect a population subjected to racial discrimination.

The capacity of health manpower policy to improve accessibility is limited to specific components of the problem. Such policies can impact most effectively on achieving a more equitable distribution of physicians among geographic areas by first balancing physician/population ratios throughout the nation. This does not necessarily mean equalizing ratios throughout the country but, rather, locating health professionals where they are currently undersupplied. For many rural areas, this objective may be fulfilled by the actual upgrading of physician/population ratio. In the inner city, neighborhood health centers, hospital outpatient clinics and emergency rooms, satellite clinics, outreach programs may be more appropriate in bringing already available urban physicians into the scarcity areas. Special patient transportation systems, including ambulance services, may be critically important in making it possible for patients to reach the available services. Health manpower policy can directly affect the availability of physicians while its contribution to improving access and utilization of services is more circumscribed. It must be recognized that merely adjusting ratios, without significantly changing policies affecting other access barriers, does not guarantee more equitable access for physicians' services.



The circumstances which have led to the unavailability of physicians in inner city and rural areas are sufficiently different to require separate strategies to meet the unique problems associated with each setting. It must again be stressed that health manpower policy can offer only partial relief from these problems. For maximum effectiveness in responding to the needs of underserved populations, a coordinated set of policies addressing different aspects of these individuals' lives must be developed. A basic characteristic shared by the majority of medically underserved population groups, regardless of their geographic location, is poverty. The link between improved economic status -- which allows for better housing, nutrition, education as well as medical care -- and improved health status should not be overlooked. Bearing in mind this most fundamental obstacle to improved accessibility of health care services, it is best to proceed with a dual strategy approach to the unavailability of health manpower.

#### Rural Areas

A multi-faceted health manpower policy can make a major contribution to improving the availability of physicians and other health professionals in rural underserved areas. The principal component of the rural health manpower strategy is a large scale expansion of the National Health Service Corps (NHSC) and use of loan forgiveness programs which are coordinated with the NHSC in their area designations and placement of volunteers. Adequate office facilities and supporting staff are often nonexistent in rural areas, thus requiring the use of such external programs to locate practitioners where they are needed and to provide the needed additional funds for nurses and other support staff, office space, and adequate equipment.

There has been considerable debate regarding the issue of requiring that a certain percentage of first year medical school positions be reserved for

students who agree in writing to accept a scholarship tied to a service commitment. The controversy revolves around the question of whether merely offering the number of scholarships deemed necessary to meet the manpower needs of underserved areas will guarantee a sufficient pool of health professionals to provide service. Some believe that, no matter how many scholarships are offered, applicants will always exceed the number available. Others do not want to rely on this voluntary mechanism for meeting program manpower requirements.

This Committee has expressed a preference for requiring schools to accept a defined number of students who agree to participate in service connected scholarship programs. Should you continue to support this approach, I would recommend that scholarship programs like the National Health Service Corps be supplemented by a student loan program which offers a service option for forgiveness of financial obligations but also offers students the option of repayment. Such assistance would be awarded according to strict financial eligibility criteria. The purpose of this loan program is to protect economically disadvantaged students from being compelled to agree to a service commitment in order to obtain a medical education.

In addition to the issue of which mechanism to utilize in recruiting participants for service connected scholarship programs, the Committee must consider the duration of the service commitment. Although it might be desirable to have each participant practice in an underserved area for four years (one year of service for each year of scholarship), both for continuity of care and for the breadth of program coverage, I suggest a maximum commitment of two years. Members of the National Health Service Corps will begin their service only after completion of residency training. Most would agree that, although we have developed some promising alternatives, we still have not discovered the means to permanently erase the imbalance of health manpower among geographic areas. For those who decide to continue practicing in underserved areas upon completion of their service commitment, the duration of that obligation becomes insignificant. If we assume, however, that

thousands of health professionals will choose to relocate after fulfilling their agreements, a four year period between completion of residency training and being able to pursue career goals becomes an excessive commitment.

In conjunction with a major expansion of the National Health Service Corps, it is essential that the criteria for designation of underserved areas be reassessed to account for populations and institutional settings which have a demonstrated need but do not qualify under current program guidelines. The Committee must also be realistic in its assessment of the ability of the National Health Service Corps to designate sites and place thousands of health professionals in service within a very limited period of time. Considering that the NHSC projects to have only 1000 professionals placed in 550 sites by 1977, even a tenfold increase in Corps volunteers creates an administrative burden. This is not to say that one should allow administrative limitations to alter ultimate program objectives. It is simply a factor which must be recognized in order to implement the program in a manner which will guarantee its effectiveness in achieving those objectives.

A variety of additional actions related to the training of health professionals should be encouraged for their inherent value and because of their supportive relationship to National Health Service Corps program priorities. Requiring the commitment of a significant proportion of medical students to provide service to underserved populations demands a commitment by the educational system to adequately prepare these individuals for that experience.

Balancing residency positions between primary care specialties and various other surgical, psychiatric, medical and other specialties, by increasing the percentage represented by the primary care specialties, is an important first step. The term primary care specialty must be clearly defined; and, for the purpose of this discussion, I mean it to include family practice, general internal medicine, and general pediatrics. The primary care needs of rural populations can be most effectively met by the family physician working in association with nurse practi-



tioners or physicians' assistants. The decline in general or family practitioners during the past thirty years has seriously deteriorated accessibility of rural residents to physician services. Family physicians exhibit a different style of practice from that of internists -- one which can be more appropriate to the needs of rural populations. They include patients of all ages in their practice and they see more patients annually than other primary care physicians. Studies have indicated that family practitioners are more likely to settle in towns with populations of 1000 to 10,000 than are other primary care physicians. For these reasons, establishment of family practice residency programs should be supported by federal legislation as an integral element of the strategy for meeting rural health manpower deficiencies.

Whether services in rural areas are to be provided by family physicians, internists and pediatricians, or physicians' assistants and nurse practitioners, it is recognized that the training of health professionals for rural areas requires a reorientation away from the current emphasis on the traditional urban inpatient hospital experience. This is most important during residency training. Area Health Education Centers (AHECs) are one vehicle for providing such training opportunities for family practice residents. They develop linkages between the medical school and community health care resources. They provide community-based exposure for physicians in training as well as increasing peer contact and continuing education opportunities for health professionals in the area. These last two factors can increase the ability of the area to attract and retain health professionals.

Remote site training for undergraduates, through AHECs, remote clinics or preceptorships offer valuable educational experiences but are of very limited significance in improving geographic maldistribution problems. Programs which allow student exposure to practice in underserved areas help to create more positive attitudes of these individuals toward practicing in such areas. Evidence has been gathered which suggests that students who express a commitment to serve underserved

groups will not lose that commitment if they are supported in achieving their goal throughout their training. Departments of family medicine, pediatrics and internal medicine must all assist students to sustain their interest in such practice and to equip them to provide the types of services required by their patients. However, without such vehicles as loan forgiveness and the National Health Service Corps scholarship program, the effectiveness of these approaches in significantly modifying location decisions of medical students is doubtful.

A practice which many medical schools have adopted, and which the Congress should encourage is recruitment of students from medically underserved areas. Studies have indicated that these students tend to select primary care and are more likely to practice in underserved areas than the majority of students. The emphasis of most programs has been on attracting students from rural areas. While this focus should continue, such programs need to expand their definitions of underserved areas in a manner similar to the National Health Service Corps so that equally needy urban areas are not slighted in special recruitment practices.

A final component of the rural health manpower strategy is continued federal encouragement of the training of nurse practitioners and physicians' assistants. The ability of these health professionals to increase physician productivity and to extend medical services is being repeatedly documented. Their practice in rural areas could significantly improve the availability of services, particularly in primary care.

Because of licensure constraints, lack of third party reimbursement and the reluctance of physicians to recognize the role of nurse practitioners and physicians' assistants, they cannot currently be relied upon as a major resource for correcting rural health manpower deficiencies. These obstacles also increase the difficulty of projecting the extent of their future involvement in this area. Given a depressed economy, physicians may become even less receptive to the emergence of these new health professionals. Without federal support, continuation of

training programs for nurse practitioners and physicians' assistants will be seriously jeopardized. Because of the potentially important role which these health professionals could assume it is incumbent upon the federal government to provide continuing support for their education.



Urban Inner City Areas

The strategy for meeting the needs of underserved urban areas differs markedly from that described for rural areas. In this instance, the cornerstone of the health manpower strategy is correcting the current imbalance between primary care and specialty residency training positions and extending the ambulatory care programs of university affiliated urban teaching hospitals. In addition, criteria for definition of underserved areas by the National Health Service Corps must be modified to include urban areas. As a first step, the number of primary care residency training positions should be increased to at least 50 percent of the total. Among other things, increasing the proportion of residents in primary care specialties will unquestionably bring more primary care physicians into urban areas. Once again, a clear definition of primary care specialty is imperative; and for this purpose, it should include only general internal medicine, general pediatrics and family practice.

In the case of the general internist, I believe that a fourth year of residency training is essential to adequately prepare the internist to meet the primary care needs of urban populations. This additional training should be conducted in ambulatory settings and offer exposure to a range of urban experiences (i.e., alcoholism, drug abuse, emergency room, neighborhood clinics), as well as to common gynecological, dermatological, psychiatric and otolaryngological problems that are common in office practice but are infrequently encountered in the inpatient teaching wards of many university medical centers and other teaching hospitals.

During the 1960's, a variety of federally funded programs were initiated to improve the availability of health services for the poor. These included children and youth projects, maternity and infant care programs, family planning, community

mental health and neighborhood health centers. In addition, the enactment of Medicare and Medicaid in 1965 increased access to care and utilization of care by many poor, disabled and aged.

At the same time that these programs have improved access to care for a large segment of the population, they have also created an unwieldy system whose fragmentation often imposes barriers to care for those the programs were designed to serve. This dilemma is evident in the myriad of arbitrary eligibility requirements; in the lack of coordination between various agencies or institutions which can provide only a piece of the care needed rather than comprehensive services; in the limited opportunities for preventive care; and, in the red tape encountered by both physician and patient when seeking third party reimbursement.

In order for the system to become more responsive to the needs of those for which its various components were established, policy revisions must be based on a thorough reexamination of these issues. Once again, health manpower policy is only one of the vehicles which must be mobilized in redressing the fragmentation of programs, services and financing. I feel, however, that by encouraging various actions by medical schools and their affiliated teaching hospitals in urban centers, health manpower policy can make a major contribution to creating a more rational system of care for inner city residents.

Federal health manpower legislation should foster the development of organized systems of care for inner city residents which will also enhance residency training experiences, especially in primary care. Such systems can involve university medical centers, public and private teaching hospitals and other affiliated facilities, each developing a model which is most appropriate for its capabilities and needs. The participation of these teaching institutions serves an additional function in that in order to induce physicians to practice in an urban area, there must be an institutional base within which to operate.

University medical centers are often the least appropriate setting for primary care programs because of their emphasis on secondary and tertiary care. At the same time, they can establish satellite clinics in the inner city and design and participate in outreach programs. The faculty can provide technical assistance to affiliated hospitals and clinics in the inner city for organizing responsive neighborhood programs or systems. The medical center can also participate in a coordinated system of care by providing the secondary and tertiary backup services for which it is best equipped.

Public teaching hospitals are usually located in urban underserved areas and are often the major source of care for inner city residents.

We are currently attempting to analyze the information available on the role of medical schools in the training of primary care specialists and in serving the needs of urban populations.

Our studies build on the excellent report prepared for Senator Javits by Dr. David Banta. The study of primary care training programs in schools of medicine and osteopathy initiated at Senator Javits' request was reported in the September 26, 1975 issue of the Congressional Record. The total number of residency training positions offered in medical school affiliated hospitals in 1974-75 was 48,703. Of this total, only 15,307 (31.2 percent) were in the primary care specialties of family practice (4 percent), internal medicine (18.8 percent) and pediatrics (8.4 percent). An additional 3,090 positions (6.3 percent of total) were in obstetrics and gynecology, considered by many to be a primary care specialty. At best, only 37.5 percent of the residency positions currently offered in medical school affiliated hospitals are in primary care specialties. If the number of primary care positions is to equal 50 percent of the total number filled by 1980-81 some major changes must occur within the next few years.



If federal health manpower policy to improve access to health care in urban areas is to stress the role of medical schools and their affiliated teaching hospitals, the first step is to determine the location of the medical schools and the hospitals in relation to cities of varying size. In the United States there are 26 cities with a population of 500,000 or more. There are university hospitals or university medical centers in 24 (92 percent) of these cities (table 4). Phoenix, Arizona and Jacksonville, Florida are the only two cities of more than 500,000 without a university medical center. Both have major teaching hospitals. In Phoenix, there are four teaching hospitals, including the U.S. Public Health Service Indian Health Hospital. In Jacksonville there are three teaching hospitals.

Among the 63 cities with 150,000 to 500,000 population there are 31 (49 percent) with university medical centers. There are 28 cities with population of less than 150,000 people that have medical schools and university hospitals or university affiliated hospitals (table 4).

This data does not reveal how many inpatients and outpatients are served by these university hospitals or the university affiliated hospitals, but one need only look at such major cities as Boston, New York, Philadelphia, Cleveland, Minneapolis, Pittsburg, Chicago, Detroit, Indianapolis, Memphis, Atlanta, Miami, New Orleans, St. Louis, Kansas City, Baltimore, Houston, Dallas, Los Angeles, San Francisco, and Seattle to appreciate the role of the medical schools and the public hospitals affiliated with the medical schools in meeting the needs of the poor in urban areas.

How well these needs are met is another matter. The fact is that private practitioners have left the inner cities and the urban residents, particularly the poor, have had to turn to hospital outpatient clinics, emergency rooms, neighborhood health centers and other publicly supported outreach programs.

The university hospitals and the affiliated community and public hospitals are in an excellent position to develop organized networks of care which would include their outpatient department and emergency room facilities as well as satellite clinics and neighborhood health centers. Outreach programs could serve to inform area residents of entry points into the system. The provision of primary care by well trained faculty and house staff in neighborhood clinics means more appropriate care for the patient and at least some relief for the hospital emergency room to address the problems for which it was established.

Community teaching hospitals could organize systems similar to the university medical centers or public teaching hospitals, depending on their location. An additional option for the community hospital is development and participation in an urban Area Health Education Center (AHEC). Thus far, the emphasis of the AHEC program has been on community based systems of education and care in rural areas. Because of the potential benefits to inner city residents, Congress should encourage testing of the AHEC concept within the urban context as well as in rural areas.

Medical schools should also consider affiliations with group practices and existing neighborhood clinics which serve urban populations. Funding should be available to facilitate the establishment of satellite clinics, but this should not discourage the schools from availing themselves of existing resources. Support for the development of such networks of care can come from several provisions of health manpower legislation. Grants for Area Health Education Centers would obviously support the development of urban AHECs. Encouragement of urban AHECs could be included in the language of the provision or expressed in the committee report accompanying the bill.

Construction grants for primary care training facilities could be applied to the creation or upgrading of neighborhood clinics as well as other ambulatory

care facilities. Special project grants could support primary care training in ambulatory settings both within and outside the hospital structure. Many medical schools are either located in urban centers or are affiliated with teaching hospitals in these areas. They are currently providing care to inner city residents through their emergency rooms and outpatient departments. The combination of this fact and the likely legislative mandate to increase the proportion of primary care residencies to 50 percent of total positions will induce schools in urban areas to consider alternatives for enlarging their ambulatory care training capacity. With appropriate incentives in the health manpower legislation, the actions these schools take with respect to ambulatory care training can also improve the delivery of services to inner city residents.

Although the same issues that limit the ability of nurse practitioners and physicians' assistants to meet the needs of underserved populations apply equally in rural and urban areas, these health professionals once again have the potential to make a significant contribution in the inner city hospital. For this reason, I reiterate my recommendation for continued support of their training programs. Nurse practitioners and physicians' assistants could function in two particularly important capacities in the urban setting. They could directly provide primary care as staff members of neighborhood clinics and ambulatory facilities of various hospitals. Their skills could enhance community outreach and follow-up activities. Within the hospital, nurse practitioners or physicians' assistants could substitute for physicians in specialty training, thus meeting hospital staffing requirements and reducing the opportunities for physicians to enter oversupplied specialties. Since the training of these new practitioners is especially suited to such functions, schools should be encouraged to test these, or similar, options.



For the final component of a strategy to meet urban health care needs, I turn to the National Health Service Corps. As I stated earlier, the criteria applied by the Corps to designate underserved areas must be revised to capture urban areas as well as rural. However, I do not believe that the problems of the inner city will be most appropriately addressed through the influx of NHSC volunteers into urban areas. Where manpower shortages, according to defined criteria, are identified in urban areas, Corps members should be assigned. Corps physicians can provide primary care in neighborhood clinics. However, it must be recognized that developing an institutional base within which both National Health Service Corps volunteers and other health professionals can practice is a prerequisite to their being able to adequately serve the health care needs of inner city communities.

A word of caution is also needed in exploring alternative strategies to meet the needs of underserved urban areas. Policies have been proposed that may markedly reduce the number of foreign medical graduates (FMGs) entering the United States for training. Many of these physicians find training opportunities in urban public hospitals or urban teaching hospitals serving the poor. The same thing is true of many Veterans Administration hospitals.

In September, 1973, there were 12,449 FMGs in training in medical school affiliated hospitals and an additional 2,459 in nonaffiliated hospitals. The FMGs constituted 30 percent of all active residents, while the 33,961 U.S. medical school graduates represented 70 percent of all the physicians in training. There are, however, very large differences among states, among cities and among hospitals within cities in the number or percent of total residents who are FMGs. The two extremes are New Jersey where 77 percent of its residents are FMGs and Arkansas with only 4 percent of the residency positions filled by FMGs. Among states with large numbers of residents the figures vary greatly:

| <u>State</u>     | <u>Total Number</u> | <u>Percent FMGs</u> |
|------------------|---------------------|---------------------|
| New York         | 8601                | 52                  |
| Illinois         | 2933                | 48                  |
| Connecticut      | 996                 | 44                  |
| Michigan         | 2091                | 44                  |
| Maryland         | 1339                | 36                  |
| Massachusetts    | 2140                | 26                  |
| Washington, D.C. | 1268                | 24                  |
| Florida          | 1202                | 24                  |
| Minnesota        | 1240                | 16                  |
| California       | 4749                | 6                   |

This is not a complete list of all the states, but it does illustrate the high percentage of FMGs in the urban, industrial states, particularly in the Northeastern region of the United States.

The differences among hospitals in New York City illustrate the difficulty of generalizing about the problem based on state-wide or city-wide data. Data from a few hospitals in New York City are as follows:

| <u>Hospital</u>                        | <u>FMG Residents</u> | <u>USMG Residents</u> |
|--|----------------------|-----------------------|
| Mt. Sinai (Mt. Sinai)                  | 20                   | 124                   |
| Presbyterian (Columbia University)     | 52                   | 239                   |
| New York Hospital (Cornell University) | 30                   | 160                   |
| Bronx Municipal (Albert Einstein)      | 5                    | 60                    |
| Metropolitan                           | 169                  | 156                   |
| Harlem                                 | 109                  | 71                    |
| Beth Israel                            | 86                   | 100                   |
| Bronx-Lebanon                          | 106                  | 16                    |
| City Hospital at Elmhurst              | 105                  | 15                    |
| Misericordia                           | 114                  | 2                     |
| Brooklyn-Cumberland                    | 127                  | 6                     |

The university hospitals (e.g., New York Hospital) have the lowest percentage of FMGs, while the hospitals with the weakest medical school affiliation have the largest number. If there is a rapid decline in the number of FMGs entering the United States it would seem likely that these hospitals would suffer a serious shortage of physicians. This may not be the case.

Restricting the number of first year residency positions to 125 percent of the number of U.S. graduates, while the number of U.S. graduates is increasing rapidly, and increasing the percentage of residency positions in primary care to 50 percent of the total will materially aid those hospitals now largely dependent on FMGs.

Restricting the number of first residencies to 125 percent of U.S. graduates by 1980 should not reduce the number of first year places below those currently offered. If there are 15,400 U.S. medical school graduates in 1980, the number of first year positions would be 19,250 and the total number of positions should be in the range of 60,000 to 65,000 in view of the fact that some specialties require more than three years of training for certification. At present 65,357



residency positions are approved for training. The major shift that must occur is the increase in the percentage of the total in primary care specialties.

The urban hospitals with large numbers of FMGs could also meet the need by shifting to full-time salaried physicians, instead of residents in training, to meet patient care needs. Nurse practitioners and physicians' assistants could also play a significant role, if properly trained, to meet the patient care needs in both medical and surgical specialties.

The strategy to meet the need identified must be an integrated one, because no single approach is likely to be applicable to all hospitals.

TABLE 4

| STATE   | CITY        | < 150,000 | 150 - 500,000 | > 500,000 | UNIVERSITY                           |
|---------|-------------|-----------|---------------|-----------|--------------------------------------|
| Alabama | Birmingham  |           | 300,910       |           | Univ of Ala                          |
|         | Mobile      |           | 190,076       |           | Univ of S. Ala (Appalachian)         |
|         | Montgomery  | 133,286   |               |           |                                      |
| Ariz    | Phoenix     |           | 262,933       | 581,562   | Univ of Ariz                         |
|         | Tucson      |           |               |           |                                      |
| Ark     | Little Rock | 132,483   |               |           | Univ of Ark                          |
| Calif   | Anheim      |           | 166,701       |           |                                      |
|         | Fresno      |           | 165,912       |           |                                      |
|         | Long Beach  |           | 358,633       |           | } UC Irvine, UCLA<br>Long Beach, USC |
|         | LA          |           | 361,561       | 2,181,061 |                                      |
|         | Oakland     |           |               |           | Stanford                             |
|         | Blo Alto    | 135,657   |               |           | UC Davis                             |
|         | San Jo      |           | 274,413       |           | UCSD                                 |
|         | San Diego   |           |               | 196,769   | UCSF                                 |
|         | San Fran    |           | 445,339       | 415,644   |                                      |
|         | San Jose    |           | 156,601       |           |                                      |
|         | Santa Ana   |           |               |           |                                      |
| Colo    | Denver      |           |               | 514,678   | Univ of Colo                         |
| Conn    | Bridgeport  |           | 156,542       |           | Univ of Conn                         |
|         | Farmington  | 14,390    |               |           |                                      |
|         | Hartford    |           | 158,014       |           |                                      |
|         | New Haven   | 34,707    |               |           | Yale                                 |

4 Squares  
to the Inch

12 1/2 x 12 1/2

| STATE   | CITY   | < 150,000 | 150 - 500,000                 | > 500,000 | UNIVERSITY  |
|---------|--|-----------|-------------------------------|-----------|---|
| Del     |  |           |                               |           |   |
| Fla     | Gainesville<br>Jacksonville<br>Miami<br>St Petersburg<br>Tampa | 64,510    | 334,859<br>216,232<br>277,767 | 528,865   | Univ. of Fla.<br>Univ of Miami<br>Univ of S. Fla<br>Emory<br>Med Coll                           |
| Ga      | Atlanta<br>Augusta<br>Columbus                                 | 59,864    | 496,943<br>154,168            |           |   |
| Hawaii  | Honolulu   |           | 324,871                       |           | Univ of Hawaii (basic sci)  |
| Iowa    |  |           |                               |           |   |
| Ill     | Chicago  |           |                               | 3,366,957 | (Chicago Med Sch Univ of Honolulu<br>Northwestern<br>Loyola<br>Rush<br>U of Chicago<br>U of Ill |
|         | Springfield  |           |                               |           | SIU (premedical)  |
| Indiana | Ft Wayne<br>Gary   |           | 174,641<br>175,415            |           |   |
|         | Indianapolis   |           |                               | 744,624   | Univ of Indiana   |
| Iowa    | Des Moines<br>Iowa City  | 46,850    | 200,587                       |           | Univ of Iowa  |



| STATE     | CITY  | <150,000          | 150--500,000       | >500,000  | UNIV   |
|-----------|---|-------------------|--------------------|-----------|--|
| Kansas    | Kansas City<br>Wichita  |                   | 168,213<br>276,554 |           | Univ of Kansas   |
| Kentucky  | Lexington<br>Louisville   | 108,137           | 361,472            |           | Univ of Ky<br>Univ of Louisville                                 |
| Louisiana | Baton Rouge<br>New Orleans<br>Shreveport                                |                   | 165,953<br>182,064 | 593,471   | LA State Univ & Tulane<br>LA State Univ                          |
| Md.       | Baltimore   |                   |                    | 905,759   | Jhms Hopkins   |
| Mass      | Boston<br>Springfield<br>Worcester                                      |                   | 163,905<br>176,572 | 641,071   | Hampden<br>Boston U<br>Univ of Mass                              |
| Mich      | Ann Arbor<br>Detroit<br>East Lansing<br>Flint<br>Grand Rapids<br>Warren | 99,797<br>47,540  |                    | 1,511,482 | Univ of Michigan<br>Wayne State<br>Mich State                    |
| Minn      | Duluth<br>Minneapolis<br>Rochester<br>St. Paul                          | 100,578<br>53,766 | 434,400<br>309,980 |           | Univ of Minn (provisional)<br>Univ of Minn<br>Mayo (provisional) |

C1



| STATE  | CITY   | < 150,000                              | 150 - 500,000                            | > 500,000          | UNIVERSITY   |
|--------|--|--|--|--------------------|--|
|        | Syracuse<br>Yentkers   |  | 197,340<br>204,910                       |                    | SUNY - Syracuse  |
| N.C.   | Chapel Hill<br>Durham<br>Greensboro<br>Winston-Salem             | 25,537<br>95,428<br>144,076<br>132,913 |  |                    | UNIV OF NC<br>DUKE<br>Bowman Gray  |
| N.D.   |  |  |  |                    |  |
| Ohio   | Akron<br>Cincinnati<br>Cleveland<br>Columbus<br>Dayton<br>Toledo |  | 275,425<br>452,524<br>243,601<br>383,818 | 750,903<br>539,677 | UNIV OF CINC<br>Case Western<br>Ohio State<br>Med Coll of Ohio                                       |
| OKLA   | OKLA city<br>Tulsa   |  | 366,481<br>331,638                       |                    | UNIV OF OKLA   |
| OREGON | Portland   |  | 382,649                                  |                    | UNIV OF OREGON   |
| RENN   | Hershey<br>Philadelphia<br>P.<br>Pittsburgh                      | 7,407                                  |  | 194,869<br>520,117 | RENN STATE<br>(UNIV of PENN, Med Coll of PENN,<br>Hahnemann Med Coll Temple, Letter<br>UNIV OF PENN) |



| STATE     | CITY                         | <150,000 | 150 - 500,000      | >500,000     | UNIVERSITY                                |
|-----------|------------------------------|----------|--------------------|--------------|---|
| WASH      | Seattle<br>Spokane<br>Tacoma |          | 140,516<br>154,581 | 530,831      | Univ of Wash                              |
| W. VA     | Morgantown                   | 29,143   |                    |              | W. VA Univ                                |
| WISCONSIN | Madison<br>Milwaukee         |          | 173,258            | 717,099      | Univ of Wisc<br>Med Coll of Wisc          |
| D.C.      | Washington                   |          |                    | 746,169      | Georgetown<br>Howard<br>George Washington |
| cities:   | total<br>unincorporated      | 37<br>28 | 63<br>31           | 26 =<br>24 = | 59<br>73                                  |

Two Additional Barriers to Access

Although our focus today is health manpower policy, actions in two additional policy areas are so critical to removing access barriers in both urban and rural underserved areas that neglecting to mention them would be a serious oversight.

--Transportation--

Accessibility to services, even when an individual has third party coverage, is often determined by available means of transportation. Although the distances may not be comparable, this factor applies equally to urban and rural populations.

In the case of emergencies, the availability of transportation becomes critical. Although the sense of urgency disappears for many primary care services, the importance of transportation for primary care should not be minimized. If transportation is not available, too costly or inadequate, utilization of primary care services (well baby care, immunizations, routine physical examinations, etc.) will be deferred.

Grants to support medical transportation programs (whether they involve reimbursement for taxi fares or sophisticated helicopters) would significantly increase accessibility to care. The development of organized systems of care within inner city communities is a step toward increasing the accessibility of services to neighborhood residents. Project grants to augment the means of transportation currently available to inner city residents would facilitate their entry into the system, thus further improving their access to care. The low population density in many rural areas precludes the development of neighborhood, or even community, systems. When options are formulated on a regional scale, the role of transportation in assuring the feasibility of such plans is undeniable.

--Reimbursement--

The incentive structures of government and private third party reimbursement schemes have significant implications for physician location decisions. Third party reimbursement mechanisms have perpetuated the trend toward specialism and location in preferred districts of metropolitan areas. Since a major portion of the care provided, or needed, in underserved areas is primary care, insurance reimbursement to physicians who select inner city or rural practice is limited. The fee schedules, used as a basis for reimbursement in public and private insurance programs, are often based on relative value scales developed by physicians. These schedules provide higher relative reimbursement for procedures and related technical services than for services such as counseling and caring provided by primary care physicians. Moreover, Medicare reimbursement is based on "customary charges" by physicians for specified services and "prevailing charges" by the physicians in a community or district of a large city. This method of reimbursement has created severe inequities among physicians in preferred metropolitan areas as opposed to physicians in inner city and rural areas for similar or identical services. Small wonder physicians prefer to settle in the suburbs and upper income urban areas when they can charge higher fees for their services.

The Medicare policy has resulted in the aged living in rural areas subsidizing the health care of people living in more prosperous urban areas. Statistics indicate that the sixteen states having the lowest average monthly medical services reimbursement per Medicare enrollee are predominantly rural. Just as changes in reimbursement policy to reduce the inequities between primary and specialty care can elevate the status of primary care practice, they can eliminate some of the current financial disincentives to practicing in an underserved area. Equalizing



reimbursement between settings in urban areas is the most important policy change for improving the accessibility of physician services in the inner city.

The federal government is responsible for providing health insurance coverage to a large segment of the population. In 1974 federal outlays for the Medicare and Medicaid programs totaled approximately \$20.6 billion. The Congress should grasp the opportunity afforded it by the magnitude of federal involvement in service reimbursement to establish a precedent of equitable reimbursement for primary care and specialty services and among preferred practice locations and less desirable or underserved areas.

Creating A More Desirable Distribution Among Specialties

It appears that a general consensus has been reached on the existence of a maldistribution among specialties and the need for well trained primary care practitioners. I would like to touch on a few key issues within this context which still require further clarification. Any attempt to determine the existing number of primary care physicians or to project future physician supply and requirements is complicated by the fact that most physicians in private practice are providing some primary care services. The recent National Ambulatory Medical Care Survey revealed that 40.4 percent of all office visits were made to general practitioners, 26.3 percent to medical specialists, 28.5 percent to surgical specialists and 4.9 percent to all other specialists. As recently as 1969, almost 60 percent of physician visits other than those to hospital inpatients were to general practitioners and less than 20 percent were to internists, pediatricians and other medical specialists. Although the increased demand for specialists accounts for part of the displacement of general practitioners by specialists, in some areas it is also related to the relative scarcity of primary care physicians, particularly general and family practitioners. These areas may have a relative oversupply of surgeons and other non-primary care specialists who often provide some primary care services.

Last month, a survey published by Medical Economics of physicians in ten specialties revealed that three-fifths of those surveyed were doing some procedures outside of their field. Seventy-five percent of the specialists in rural areas were providing primary care. Perhaps the most interesting findings of the survey were the reasons why certain groups of specialists chose to provide primary care. While some physicians felt it was essential to maintaining their ability and stature as "complete" physicians, others were motivated more by economic factors. Young specialists who are not yet fully established supplement their practices with primary care. Older specialists who are phasing down their practices substitute

primary care for some more demanding procedures. Physicians in oversupplied specialties often expand the primary care component of their practices. Faced with the threat of malpractice, some specialists prefer providing primary care to performing high risk procedures.

Although these specialists may be meeting some primary care needs, this informal system of primary care should not be perpetuated. The focus of specialty training is inappropriate for primary care; and primary care by specialists raises the cost of services to the consumer.

The term "primary care physician" still creates a significant amount of confusion and therefore must be clearly defined. Often, "primary care physician" is equated with family practitioner. Primary care is not, however, exclusive to the training and skills of the family physician. Legislation to encourage the training of primary care physicians should limit its definition to general internal medicine, general pediatrics and family practice. It is often suggested that obstetrics and gynecology be included in the definition of primary care. Many obstetrician-gynecologists are providing excellent primary care to their patients. The central focus of their training, however, is maternity care and surgical experience rather than primary care.

Considered within the context of a general framework for good primary care training, obstetrics-gynecology and other specialties which are sometimes identified as primary care do not meet the requirements. The major content areas of primary care have been divided into three broad categories by Alpert and Charney:

- short term (one day to one month): emergencies, common infections, acute hospitalizations and minor surgery;
- intermediate (two weeks to three months): initial phases of chronic illness, behavioral problems and health education; and
- long term (two months to years): family management of chronic illness, growth and development, team work and work with consumers.



Not only has a consensus been reached on the desirability of having well trained professionals to meet our primary care needs, but there is widespread agreement on the goal of raising the proportion of primary care residency training positions to at least 50 percent of the total. For those who would include obstetrics and gynecology as a primary care specialty the percentage for primary care residencies should be raised to 55 or 60 percent. Accepting the objective of 50 percent, the debate revolves around the means for its achievement and the most appropriate mix among the three primary care specialties (family practice, general internal medicine and general pediatrics) which will comprise that 50 percent.

Although the rapid increase in the number of family practice residency positions has received much attention, it cannot begin to match the dominant role of internal medicine as the major primary care specialty. This becomes evident in both statistics on practicing physicians and physicians in training. It is true that the most significant increase in the number of primary care residencies during the past few years was in family practice. The number grew from 131 filled first-year positions in 1970 to 766 filled first-year positions in 1973 to over 1,450 first year positions offered for 1975-76. The total number of family practice and general practice residencies offered in 1975-76 was 3,305. Although the growth has been rapid, these figures still represent less than 5 percent of total available residency positions. It is too early to predict the long term impact of this rapid growth in family practice residencies or whether it will continue.

Most family practice residency programs are located in university affiliated hospitals, while only a few have been established in university medical centers. A critical factor in developing a family practice program is the recruitment of family practice faculty of equal caliber to their colleagues in other primary care specialties. Reliance upon physicians currently in residency training to accept family practice faculty positions is a long term endeavor which cannot meet the

immediate demand. Practicing family physicians and general practitioners have been moving into faculty positions in recent years. The ability of family practice programs to continue to recruit faculty at a rate which will allow further rapid expansion of positions is questionable.

In addition to faculty recruitment problems faced by family practice training programs, a number of curriculum and administrative issues await resolution. For example, will departments or divisions of family practice have full responsibility for inpatient care of selected patients? How much of the training will be conducted in other departments, such as pediatrics, obstetrics and gynecology and surgery? While these programs will undoubtedly continue to develop, there is little likelihood that a rapid expansion of family practice residencies would fill the gap in primary care created by the decline in general practice.

Family practice programs must develop in concert with programs in the other primary care specialties if the goal of having 50 percent of graduating medical students become primary care specialists is to be achieved. This point becomes even more obvious when one considers that training positions in internal medicine represent nearly 60 percent of all first-year and total primary care training positions, followed by pediatrics (26 percent) and general and family practice (14 percent). Even if obstetrics and gynecology is added to the list of primary care specialties, it does not significantly modify the role of internal medicine as the dominant primary care specialty.

This data supports the view of the American Board of Internal Medicine that internal medicine is the primary care specialty for adults. In 1973 the total number of general and family practitioners was about equal to the number of internists and pediatricians although a far higher percentage of the former group were in office based practice. By 1980 the number of internists will far exceed the number of general and family practitioners and the number of pediatricians and internists together will be more than double the number of family and general practitioners. (Table 5)

TABLE 5

NUMBER OF ACTIVE PHYSICIANS (M.D.) ENGAGED IN PRIMARY CARE: ACTUAL 1963 AND 1970; PROJECTED 1980 AND 1990

| Activity and specialty                 | Number of physicians (M.D.) |         |         |         | Percent distribution |       |       |       |
|--|-----------------------------|---------|---------|---------|----------------------|-------|-------|-------|
|  | 1963 <sup>1</sup>           | 1970    | 1980    | 1990    | 1963                 | 1970  | 1980  | 1990  |
| Total active physicians . . . .        | 261,730                     | 311,200 | 430,240 | 571,030 | 100.0                | 100.0 | 100.0 | 100.0 |
| Physicians in primary care . . . .     | 125,530                     | 137,520 | 178,140 | 226,150 | 48.0                 | 44.2  | 41.2  | 39.3  |
| General practice . . . . .             | 66,870                      | 66,200  | 47,210  | 36,700  | 25.6                 | 18.1  | 10.9  | 6.4   |
| Family practice . . . . .              | N.A.                        | 1,690   | 2,920   | 4,450   | —                    | 0.5   | 0.6   | 0.7   |
| Internal medicine . . . . .            | 30,430                      | 41,870  | 71,020  | 105,620 | 11.6                 | 13.5  | 16.5  | 18.4  |
| Pediatrics <sup>2</sup> . . . . .      | 12,930                      | 18,820  | 31,140  | 45,410  | 4.9                  | 6.0   | 7.2   | 7.9   |
| Obstetrics and gynecology . . . .      | 15,300                      | 18,880  | 25,950  | 33,970  | 5.9                  | 6.1   | 6.0   | 5.9   |
| Physicians in all other activities . . | 136,200                     | 173,680 | 252,100 | 344,880 | 52.0                 | 55.8  | 58.8  | 60.7  |

<sup>1</sup> See table 30 for explanation of adjustment of these figures.<sup>2</sup> Excludes 1,690 diplomates in family practice who have been shown separately.<sup>3</sup> Includes pediatric allergy and pediatric cardiology.Source: 1963: Theodore, C.N. and Sutter, G.E. *Distribution of Physicians in the U.S., 1953*. Chicago, American Medical Association, 1957.  
1970: Haug, J.N.; Roback, G.A.; and Martin, B.C. *Distribution of Physicians in the United States, 1970*. Chicago, American Medical Association, 1971.REPRODUCED FROM: U.S. Department of Health, Education, and Welfare; Bureau of Health Resources Development; *The Supply of Health Manpower: 1970 Profiles and Projections to 1990*; Pub. No. (HRA) 75-39; Washington, D.C.; U.S. Government Printing Office, 1974; p. 67.



Trends in primary care residency training provide the basis for this projected role of internal medicine. Combining general and family practice, and examining only filled positions, a steady state can be identified until the establishment of family practice as a specialty caused a sharp unswing in these training programs. The number of filled residency positions in internal medicine grew by an even greater amount, although the percentage increase was less than that for family practice since the establishment of its training programs in 1969. Pediatrics has also experienced substantial growth since 1963. (Table 6) The trends of the past decade, including the dominant position of internal medicine as the major primary care specialty, illustrate why it is imperative for internal medicine training to provide adequate preparation for primary care practice.

TABLE 6

GROWTH IN PRIMARY CARE RESIDENCIES: POSITIONS FILLED, 1963-1973

| Specialty                   | Year |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|
|                             | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 |
| General and Family Practice | 370  | 377  | 494  | 395  | 403  | 402  | 372  | 532  | 878  | 1312 | 2020 |
| Internal Medicine           | 5129 | 5471 | 5600 | 5531 | 5775 | 463  | 6503 | 7194 | 7869 | 8279 | 9427 |
| Pediatrics                  | 1876 | 2003 | 2125 | 2177 | 2314 | 2375 | 2658 | 2805 | 3069 | 3495 | 4231 |

SOURCES: <sup>1</sup>Lerner, H.J. *Manpower Issues and Voluntary Regulation in the Medical Specialty System*. New York, 1974.

<sup>2</sup>American Medical Association, Division of Medical Education. "Medical Education in the United States 1973-1974," *Journal of the American Medical Association*, Anne Crowley (ed.) 234: Supplement, 1975. Supplement 234, 1976.

At the present time, 38 percent of filled, first year residency positions are in the primary care specialties of general and family practice, internal medicine and pediatrics. If obstetrics and gynecology is included as a primary care specialty, as it is by the Department of Health, Education and Welfare, the figure rises to 43 percent. These statistics may be misleading unless total filled residencies in the primary care specialties are also considered. Of total filled residencies, only 31 percent are in general and family practice, internal medicine and

pediatrics, increasing to 38 percent with the addition of obstetrics and gynecology. The difference between the percentage of first year residency positions in primary care and that for total filled positions in primary care could possibly be due to internal medicine residents entering other fields such as radiology or neurology after their first year.

The DHEW report on health manpower supply in 1970, with projections to 1990, indicates that the percentage of residencies in the primary care specialties has increased slightly since 1970 when these specialties represented 37 percent of all filled positions. To increase the percentage of primary care specialty positions to the 50 percent level would require an increase of 5,500 positions above current numbers. This shift cannot occur overnight, but in view of the fact that there has been an increase of 10,000 in the total number of residencies available in the past five years, it should be possible to increase primary care residencies by at least 5,000 in the next five years while reducing surgical residencies by an equal amount or more. Changing the mix of available residencies would affect all medical school graduates equally, it would have a discernable impact on health care within five to ten years and it would only modestly limit the student's freedom to make his or her own career decision.

The central issue in the debate on specialty maldistribution is whether desired changes in the total number and mix of residencies can be effected voluntarily, perhaps with additional financial incentives, or whether they will require the imposition of government regulation and control. Most professional groups, including the Coordinating Council on Medical Education, favor incentives and the voluntary approach. In its testimony before the Subcommittee on Health and the Environment, U.S. House of Representatives, the AMA presented data which, according to its interpretation, indicated that the relative shortage of physicians in primary care was correcting itself and that the geographic maldistribution of residencies was also improving

with the establishment of new programs by over twenty new medical schools. The trends in specialty training during the past forty years and the failure of present voluntary mechanisms to effectively control the total number of residencies or to create a balanced mix among training positions in primary care and other specialties is hardly a cause for optimism.

To understand the limitations of relying on a voluntary approach, one must be aware of the current system of governance in graduate medical education. The AMA Council on Medical Education has actively reviewed medical schools for accreditation for nearly 70 years. In 1942 it began to jointly share this responsibility with the Association of American Medical Colleges through the establishment of the Liaison Committee on Medical Education. The AMA through its Council on Medical Education has also maintained an influential role in the accreditation of graduate medical education, although several other bodies are officially charged with accreditation authority. Internship programs traditionally have received accreditation from the AMA's Internship Review Committee. Review and accreditation of residency programs has been largely in the hands of the AMA, the specialty societies, and the American Hospital Association. In describing the residency review process, particularly its lack of coordination, the Committee on Goals and Priorities of the National Board of Medical Examiners notes:

The Residency Review Committees regularly receive documentation of the program activities from program directors and periodically initiate site visits to review the adequacy of educational programs. Little coordination exists among the various Residency Review Committees, however, and required standards for the many residency programs vary from one committee to another.

The need for a more effective mechanism for relating undergraduate and graduate medical education has long been recognized. In January 1972, the American



Medical Association (AMA), the Association of American Medical Colleges (AAMC), the American Board of Medical Specialties (ABMS), the American Hospital Association (AHA), and the Council of Medical Specialty Societies (CMSS) outlined a new organizational structure for coordinating the accrediting bodies for both undergraduate and graduate medical education. Accreditation of undergraduate medical education remains the responsibility of the Liaison Committee on Medical Education. The integration of the internship into the initial phase of residency training has led to many internships being approved by the Residency Review Committees since 1972. In 1975, all internships will be integrated into the first year of residency training. At the same time responsibility for accrediting graduate medical education will pass to the recently established Liaison Committee on Graduate Medical Education which will base its final actions on recommendations presented by the individual Residency Review Committees. The Coordinating Council on Medical Education (CCME) is to provide the means of coordination between the two committees responsible for accreditation of undergraduate and graduate medical education.

The formation of the CCME represents an important step toward integration of medical education and accreditation. It is too early to evaluate, however, whether the CCME will be able to respond to such national priorities as correcting the relative shortages in primary care residency positions. Considering the medical school as part of the voluntary mechanism to control and redistribute residency positions will achieve minimal change. Even though the number of university affiliated residency programs has increased substantially, the medical school exerts little control over the mix of its training programs. Such decisions remain the province of department chairmen and the Residency Review Committees.

Accreditation of residency programs, while focusing on quality of education, has tended to follow a pattern which reflects the best interests of the individual specialties regardless of their relationship to national priorities. Clearly the

present voluntary "market" system cannot be relied upon to achieve increased numbers of primary care physicians. More aggressive actions will be needed since it is now universally recognized that increasing the aggregate supply of physicians will not assure an appropriate distribution of specialists to meet the nation's primary health care needs in the most efficient or desirable manner.

A more feasible method of achieving a desirable specialty mix among residents is the creation of a joint federal and professional regulatory mechanism at the national level. This mechanism would utilize organizations which have proven competence in evaluating the content and quality of graduate training programs. Moreover, its authority is backed by the leverage of federal capitation support and reimbursement for services under Medicare and Medicaid which is necessary to guarantee implementation of its decisions.

To achieve the desired balance among specialties in residency training positions requires several concomitant actions. A first essential step is to restrict the annual number of available first year residency positions to a defined percentage of U.S. medical graduates from the previous year. The figure generally recommended is 125 percent of U.S. medical graduates. This number affords opportunities for students from abroad to participate in U.S. graduate medical education while not allowing the excessive numbers of positions which currently exist in various specialties. If the total number of residency positions is not controlled, the absolute number of residency positions in oversupplied specialties can continue to expand even with a requirement that 50 percent of all positions be in primary care.

The concern has often been expressed that restrictions in the total number of first year residency positions will mean the loss of essential positions in some hospitals, especially those located in urban underserved areas and those with high concentrations of foreign medical graduates. This, in fact, is not the case. Phasing

in the reduction from the current 155 percent of U.S. medical graduates to 125 percent in 1980 shows 19,250 first year positions in 1980, based on an estimated 15,400 U.S. medical school graduates in 1980. In 1973, there were 18,076 first year positions available and the number is probably not above the 19,250 figure today. The maintenance of at least current numbers of residency positions is assured by the expanded enrollments of U.S. medical schools during the past five years. Controlling the total number of available first year positions could in fact bring more U.S. medical graduates into positions which are now considered less desirable, since there will be fewer alternatives open to them.

Redistributing residency positions within the limited total number in order to establish 50 percent in primary care can be accomplished at two levels. The more quickly attainable goal is to establish 50 percent of all first year residencies in primary care at the national level. This could be achieved in a three year period. This approach does not guarantee, however, an even distribution of primary care residency positions among all schools. Moving from the macro level to the requirement that each school, with its network of affiliates, have 50 percent of its residencies in primary care may call for a longer implementation period. For some schools, this stipulation presents no problem; but for others, where current primary care positions comprise perhaps 25 percent of the total, it represents a dramatic change. Such a transition would necessitate a minimum of three to five years.

Requiring schools to increase the proportion of primary care training positions can indirectly improve the geographic distribution of physicians and training programs in the surrounding areas. In order to expand their ambulatory care training capacities, many schools will have to affiliate with more community hospitals and clinic facilities. Well qualified hospitals which have not participated in training will begin to establish residency programs. Those which are currently involved in graduate education will have the opportunity to expand their role.



Monitoring the distribution of specialties among residency training programs becomes more complex when the "50 percent in primary care" requirement is implemented at the micro level. The external review process conducted by such groups as the Residency Review Committees and the Liaison Committee on Graduate Medical Education will be responsible for determining whether the schools' programs actually meet the definition of primary care stipulated in the legislation and interpreted by the national residency review mechanism and whether the educational content is acceptable. Based upon these professional findings, the federal government will take any necessary action to guarantee compliance with the law.

The federal government has two effective mechanisms at its disposal for enforcing the limitations in number and mix of residency positions: capitation payments to schools and federal third party reimbursement for health care services authorized by Medicare and Medicaid. Federal payments through the Medicare and Medicaid programs fund a major portion of stipends for residents. The payments to hospitals are based on services rendered Medicare and Medicaid beneficiaries by physicians in training. Federal participation in the support of residency training thus provides necessary leverage for the federal government to effect the policy changes mandated by Congress.

Capitation payments to medical schools can also be used to induce schools to meet national priorities in the training of physicians. The withholding of either capitation funds or federal reimbursement for services provided to Medicare and Medicaid beneficiaries could be imposed as a sanction against non-compliance whether the mandated goal of having 50 percent of all residencies in primary care was applied at the national level or to every school.

As was the case in my earlier discussion of improving access to health care services, I cannot leave the issue of specialty maldistribution without mentioning third party reimbursement. Problems of specialty distribution will require changes

in reimbursement policies for primary care. Physicians who select specialty practice are currently rewarded by the structure of health insurance payment schemes. Much of the service provided by primary care practitioners is not reimbursed through insurance coverage. Modification of federal insurance payment mechanisms to reimburse ambulatory care services at an equivalent level with specialty care would equalize the financial incentives for entering primary and specialty care and thus have a major impact on elevating the status of primary care among medical school graduates. In addition, the training of primary care physicians would be greatly facilitated if medical schools and their affiliated teaching institutions could receive reimbursement for the primary care services provided in their ambulatory facilities. Currently, the resident in specialty training can help pay his way through providing reimbursable specialty services to patients. If the same were true of the primary care resident, the reluctance of schools to train these physicians would dissipate.

Foreign Medical Graduates

The issues relating to foreign medical graduates represent the one area in which there is not only substantial agreement on the problems but also on the means to resolve the problems. This Committee has gathered information on this issue from numerous sources. Just last month, you devoted a hearing to the problems of foreign medical graduates. For each of these reasons, I have decided to only briefly discuss this subject.

The basic goal underlying any policy toward foreign medical graduates should be the achievement of quality medical care to all individuals. The policy should not be discriminatory in either a positive or negative manner. Preferential policies toward immigration of foreign medical graduates have allowed increasing numbers of FMGs to enter the U.S. health care system. Reliance upon FMGs to meet U.S. physician requirements has hampered effective planning and long range policy development for relating health manpower training to national needs. Tapping the often inadequate physician pools of other countries to fill gaps in U.S. physician supply is a morally unjust and unwise policy to perpetuate. This is not to say that federal policy should eliminate the flow of FMGs, and thus deny beneficial training opportunities to foreign citizens, but rather calls for a reduction in the magnitude of that flow.

There are those who recognize the need to respond to the issues which have arisen from national policy toward FMGs in the past decade but who call for needed changes to take place without Congressional action. However, the recommendations we hear today were proposed almost ten years ago and were not acted upon voluntarily. With the situation deteriorating over time, the Congress has an obligation to take action to protect the public interest in this matter.

In 1967 the Expert Panel on Foreign Medical Graduates of the National Commission on Health Manpower proposed a national goal for the U.S. medical education system to provide a sufficient number of well trained health personnel to meet national



needs, and to assist other countries to improve their systems of medical education and levels of medical practice and health status. In conjunction with this goal, the Expert Panel recommended that FMGs pass qualifying exams equivalent to those for U.S. medical graduates and that they be required to enter orientation programs for the assessment of their competence in the basic and clinical medical sciences and in English. Almost nine years later, we find these or similar proposals being recommended by the Coordinating Council on Medical Education, the Sun Valley Forum, the Association of American Medical Colleges Task Force on Foreign Medical Graduates and the federal Interagency Working Group on Foreign Medical Graduates. Their recommendations regarding changes in immigration law, qualifying examinations, proficiency in English and orientation programs are sound. To assure their implementation, these policies should be incorporated into federal legislation.

Because of the quality of FMG provisions recommended to the Congress and their excellent potential for meeting the problems, I wish to add one final comment in this area. The proposal to restrict the current number of available first year residency positions to a defined percentage of annual graduates from U.S. medical schools is often considered a means to control the number of foreign medical graduates. With the other policies available to the Congress, controlling the number of residency positions is not necessary to reduce the flow of FMGs. It is, however, an essential element in the previously described strategy to redistribute residency positions among specialties. Without a ceiling on total residency positions, excesses in certain specialties will continue to exist. Because of its importance in achieving a more desirable mix among specialties, the fundamental purpose of the provision to control the number of residency positions should not be confused with one of its affirmatively perceived side effects.

Summary

The primary purpose of health manpower policies is to assure an adequate supply of the appropriate kinds of health personnel to provide needed health services. We have not achieved this goal and, in recent years, we have begun to recognize that many of our problems relate to primary health care. There are three questions that must be asked that relate to primary health care and health manpower policies.

1) What can and should be done to establish and maintain an adequate supply of primary care practitioners? What should be the roles of U.S. medical school graduates? Foreign medical graduates? Nurse practitioners and physicians' assistants?

2) What can and should be done about present patterns and trends in the distribution and mix of specialists?

3) What can and should be done to locate and support primary care practitioners where they are needed to assure more equitable access to care?

These might be described as the problems of aggregate supply, specialty maldistribution and geographic maldistribution. This shorthand description grossly oversimplifies the problem of achieving access to needed health care of reasonable quality, which we can all afford. But more of that later.

In my testimony I first review the growth of the federal government in health manpower development, health care financing, biomedical research and in health planning and regulation. Federal policies in all of these areas have an impact on health manpower development and deployment.

Direct aid for students and health professions schools in the past 12 years has emphasized increasing the number of graduates of U.S. medical schools, and

other health professions schools, stabilizing financial support and increasing opportunities for members of minority groups and low-income students in general, and for women. In most cases the objectives have been achieved, but most of the health professions schools, particularly the medical schools, have become increasingly dependent on the federal government.

In addition to direct aid for health professions education, federal policies related to Medicare and Medicaid reimbursement of residents in training and physicians in practice have tended to have an adverse effect on correcting specialty and geographic maldistribution; NIH research and training grants have given a big boost to training in medical and surgical subspecialties; and the immigration laws and regulations of the Justice and State Departments have been instrumental in encouraging the large influx of foreign medical graduates. The recently enacted Social Security Amendments of 1972 with the provisions establishing Professional Standards Review Organizations, the Health Maintenance Organization Act and the National Health Planning and Resources Development Act (P.L. 93-641) will all have an impact on health manpower requirements, but what that impact will be remains to be seen. It would appear that we have not developed a coherent health manpower policy at the federal level that would include consideration of both the supply and demand aspects of the problem. Nor has it been possible to include within such a policy the Department of Defense with its new Uniformed University of the Health Sciences or the Veterans Administration with its vast health manpower programs, including funds to support new medical schools or to expand existing schools.

There are at least five health manpower areas in which federal action can contribute to correcting current inequities and to assuring greater accessibility to available health services:



- 1) Develop an adequate number of well-trained health professionals to meet expected demand -- with full consideration given to the roles of U.S. medical graduates, foreign medical graduates, nurse practitioners and physicians' assistants;
- 2) Increase the absolute number of primary care physicians and their proportion in relation to consulting specialists;
- 3) Decrease the present inequities in the availability of medical services to rural and low-income urban populations;
- 4) Expand opportunities in the health professions for women, minorities and students from low-income families;
- 5) Improve the productivity of physicians particularly through greater and more efficient use of nurse practitioners and physicians' assistants.

In order to develop an adequate number of U.S. health professionals there needs to be additional federal financial support for those professions that are likely to be in short supply without such support, particularly physicians, dentists and osteopaths. As a minimum the school should be required to maintain or slightly expand enrollments to compensate for the decline in foreign medical graduates likely to occur during the next five years. The decline in FMGs will occur, or should occur, if they are required to pass qualifying examinations equivalent to those of U.S. graduates and if they are required to enter orientation programs for the assessment of their competence in the basic and clinical medical sciences and in English. Expanded programs for training nurse practitioners and physicians' assistants developed in conjunction with practicing physicians, medical and nursing schools can also contribute significantly to meeting the nation's health manpower needs.

To increase the absolute number of primary care physicians and their proportion in relation to consulting specialists will require a restriction on the total

number of residency positions approved and an increase of about 5,000 positions in the primary care specialties of family practice, general internal medicine and general pediatrics in the next five years. The total number of residencies should be limited to 125 percent of U.S. graduates by 1980, and 50 percent of those positions should be in the primary care specialties. It must be recognized that limiting the total number of residency positions is an essential first step to creating a more desirable distribution among specialties. If the total number of residency positions is not controlled, the absolute number of residency positions in oversupplied specialties can continue to expand even with a requirement that 50 percent of all positions be in primary care. The proposal to restrict the number of residency positions is often considered as a means to control the influx of FMGs into the United States. Several other actions have been proposed which more adequately address the FMG problem. Although a side effect of the proposal could be some limitation on the number of FMGs entering U.S. graduate training programs, its primary purpose in balancing the distribution among specialties should not be overshadowed by its secondary relation to the FMG issue. To achieve this redistribution will require a joint federal-professional partnership to restrict the number of residencies and federal financial incentives to increase the number and/or expand existing residency training programs in family practice, general internal medicine and general pediatrics.

The past policies that have increased the opportunities for low-income families, minority groups and women should be continued. New stress should, however, be placed on recruiting students from rural and inner city areas in order to increase their educational opportunities and to hopefully better serve the needs of individuals living in these underserved areas. These policies will help to correct the imbalances in physician availability in rural and urban

underserved areas. Far more important will be a major expansion of the National Health Service Corps to meet the needs in rural areas and the development of a multifaceted urban strategy that is based on the nation's medical schools and their affiliated public and community hospitals to better serve the urban poor. These institutions already provide a wide range of services for the urban poor, but there is great need to expand outreach and primary care programs in sites remote from teaching hospitals in order to facilitate access, reduce cost and provide the kind of ready access and continuity of care that are essential ingredients in higher quality primary care. Part of this strategy also requires expansion of rural and urban Area Health Education Centers, expansion of primary care residency training and expansion of nurse practitioner and physician's assistant training programs.

Changes in health manpower policy cannot do the job, however, unless there are changes in Medicare and Medicaid reimbursement policies. These policies now favor urban over rural practitioners, suburban and upper income area urban practitioners over those who practice in low-income areas, surgeons over medical specialists and medical subspecialties which utilize a great many procedures such as electrocardiology, chest x-ray and endoscopy as an integral part of their practices.

The problems are complex but I am optimistic that effective strategies will be developed because we are openly facing and discussing the issues. Action is sure to follow.

Two final notes. Any attempt to develop alternative health manpower policies faces many difficulties and uncertainties. The poor quality of the available data precludes definitive analysis in a number of crucial areas. It is essential that the federal government assume a major responsibility in the area of health



manpower data collection, analysis and dissemination in the future if we are to evaluate the effectiveness of proposed policies.

Finally, in examining future policy choices related to physician manpower, it must be recognized that the medical school is only one of a number of institutions or agencies which must respond if legislative objectives are to be achieved. Professional organizations, such as the Coordinating Council on Medical Education, the Liaison Committee on Graduate Medical Education and the residency review committees, hospitals and the American Hospital Association, the Bureau of Health Insurance in the Social Security Administration, the State, Justice and Labor Departments, the Department of Health, Education and Welfare, the Veterans Administration, local medical and dental societies, state health departments and many other agencies and institutions must be involved if we are to effectively address the problems of specialty and geographic maldistribution and the problems posed by the large numbers of foreign medical graduates coming to the United States for training.

APPENDIXEstimating Physician Shortage in the United States

Few areas cause more disagreement than estimates of physician shortage in the United States. Estimates of aggregate shortage as recently as 1970 ranged as high as 50,000 physicians. Studies by the Division of Health Manpower Intelligence in DHEW estimated shortages in the early 1970's of from approximately 21,000 to 25,000 physicians.

Because of the need to estimate with a reasonable degree of accuracy what the needs are, a variety of methods have been developed in recent years that have produced widely different estimates of physician shortage and identified different areas as underserved.

The first questions that must be asked are how are underserved areas to be defined and how many physicians (MD and DO) will be required to meet the needs in these underserved areas. Estimates of need vary depending on the criteria used in defining such areas. In examining the data generated through different projection techniques, it is necessary to differentiate between the need for and the demand for services before one can determine the adequacy of physicians supply.

Need is an estimate of the quantity of medical services that ought to be consumed in order for a population to receive optimal medical care and be as healthy as possible. It is based on the opinion of physicians and other experts. These standards change as medical knowledge advances and concepts of adequate health care are revised. Need, as estimated by experts, always exceeds the demand of the public for medical care.

The demand for medical care relates to the actual use of services. Demand is related to a variety of factors, including the price of medical services, the financial resources, including health insurance, of the individual or the group

being served, and the psychological wants of the population.

Models used to forecast requirements include:

- approaches based on professionally defined criteria;
- methods based on current utilization rates of health services by a defined population group with access to comprehensive health services, as exemplified by group practice - prepaid health care plans;
- techniques using physician/population ratios; and
- economic methods, including econometric modeling.

These methods have generally been applied in an effort to define national, regional or state manpower requirements. They have also been used to define underserved areas within states.

Although there is agreement that the geographic maldistribution of physicians is a critical health manpower problem, there is no agreement on the number of physicians required to meet the needs of underserved rural and urban areas. Moreover, no consensus has been reached on whether the problem encompasses an aggregate national shortage of physicians or is solely attributed to their maldistribution. There are those who believe that present numbers are inadequate, others who believe the number is about right and, still others who contend that the present physician supply is in excess of the number needed to meet both the demand and the need for medical care.

Determination of need and demand for physicians is complicated by the fact that physicians play a major role in generating the demand for their own services and in generating the demand for most other services including hospital care and prescription drugs. The economic incentives in the present fee-for-service system encourage physician-generated demand and make it possible for the system to absorb more and more physicians in metropolitan areas, while reducing their



availability in rural areas. By seeing more patients per hour and per day, working longer hours and employing more paramedical personnel, physicians in rural areas compensate partially for their fewer numbers. By these means they are often able to see twice as many patients in a year as their urban counterparts. The higher fees charged in urban areas allow urban physicians to meet their income aspirations while seeing fewer patients and working shorter hours.

At present, comparison of physician-to-population ratios is the method most frequently applied to determine physician requirements. The following criteria are applied by the National Health Service Corps to identify critical medical shortage areas:

- If the area in question consists of a group of census tracts within a city, it must have:
  - (i) a primary care physician-to-population ratio of less than 1 to 4,000
  - (ii) no neighborhood health center
  - (iii) no organized hospital outpatient department within 10 miles of the center of the area
  - (iv) a primary care physician-to-population ratio of less than 1 to 3,000 within the entire county in which a shortage area is located.
- If the area in question is a group of census tracts within a county (not located in a tracted city) the same criteria apply except the hospital outpatient department must be 20 miles or more from the center of the area.
- If the area in question is made up of one or more civil divisions or census county divisions within an untraced county, it must have (i) and (iv) above.
- If the area in question is an entire county, it must have (i) above.

In metropolitan areas, the definition of a primary physician is limited to physicians in general or family practice, internal medicine and pediatrics. In non-metropolitan areas, those obstetrician-gynecologists and general surgeons who spend at least 50 percent of their time providing primary care are also included.

Using the above criteria, a total of 981 medical shortage areas were identified nationwide by the Department of Health, Education and Welfare. In 1975, the National Health Service Corps approved 428 sites for Corps assistance and placed 405 doctors, dentists, nurse practitioners and other health professionals in 190 communities in 40 states. Approximately 85 percent of these were in rural areas with the remainder in urban inner city areas. It is hoped that the Corps might have as many as 1,000 health professionals in 550 sites by 1977.

At the present time, there are at least 17 separate legislative authorities in the Public Health Service Act that relate to manpower shortage areas. Of these, only five, including the National Health Service Corps, have developed criteria for designating shortage areas or have actual listings of shortage areas. These areas are variously referred to as "medically underserved areas," "shortage areas," "critical health manpower shortage areas," etc. The Health Professions Loan Program and the Physician Shortage Area Scholarship Program define a shortage area as one with an active, non-federal physician-to-population ratio of 1 to 1,500, a ratio quite different than that applied by the National Health Service Corps. Using the physician-to-population ratio of 1 to 1,500, 2,048 physician shortage areas in 49 states were identified. Comparison of physician shortage estimates in Alabama, Iowa and Oregon, illustrates the differences which arise from the different criteria used in the two DHEW programs thus indicating the importance of developing agreed upon criteria for the determination of underserved areas. (Table I).

Table I  
Physician Shortage, by County

| Physician Shortage Category             | Number of Counties |      |        | Percent Distribution |      |        |
|---|--------------------|------|--------|----------------------|------|--------|
|   | Alabama            | Iowa | Oregon | Alabama              | Iowa | Oregon |
| Total Counties                          | 66                 | 99   | 35     | 100                  | 100  | 100    |
| Shortage, Loan Forgiveness              | 57                 | 47   | 8      | 86                   | 47   | 23     |
| Shortage, National Health Service Corps | 20                 | 3    | 2      | 30                   | 3    | 6      |

In a study completed in 1974, the Division of Health Manpower Intelligence estimated that there was a nationwide shortage of 26,700 physicians. This estimate was based on an ideal ratio of one physician per one thousand people in every county in the United States. Using state economic areas instead of counties, the "shortage" was reduced to 19,600.

Recent DHEW estimates for the Senate Health Subcommittee, based on state Economic Areas (SEAs), estimate shortages in rural areas ranging from 21,000 to 29,000 physicians. These estimates were based on physician-to-population ratios in the SEAs of 100 physicians per 100,000 and 65 primary care physicians per 100,000 population. In 1970, there were 156 physicians per 100,000 population in the United States as a whole. The ratios differed significantly by region from a low of 105 physicians per 100,000 population in the East South Central Region to 190/100,000 in the New England and Middle Atlantic Regions. Among states, the differences are even more pronounced ranging from 71.9 physicians per 100,000 population in South Dakota to 197.8/100,000 in New York. The variation among rural and urban areas is even greater than interstate disparities. A ratio of fewer than 50 physicians per 100,000 population is common in rural areas whereas greater metropolitan areas have more than 175 physicians per 100,000 population.

Access to the health care system depends largely on access to primary care physicians. They are more equitably distributed than are all physicians, but there remain significant differences between rural and urban areas and among various



regions and states. Estimates of the number of physicians required to adequately meet the need for primary care range from a high of 133 per 100,000 calculated by Schonfeld and associates at Yale to the currently available numbers. Experts have yet to agree on the existing number of primary care physicians. This is due, in part, to the lack of a single definition of who constitutes the primary care physician pool and to the unresolved question of whether estimates of current supply should consider only physicians in the primary care specialties or should also include any physician who actually devotes a portion of his practice to primary care. In 1972, Parker and Huntley estimated that there were 41 primary care physicians (general and family practitioners, general internists and general pediatricians) per 100,000 population while the DHEW computed a ratio 60 primary care physicians per 100,000 population. The DHEW estimate expanded the definition of primary care to include obstetrician-gynecologists as well as incorporating interns and residents into the calculation. The ratio of 65 primary care physicians per 100,000 population used by DHEW as a basis for its analysis of SEAs for the Senate Health Subcommittee in 1975 is probably closer to present ratios, if interns and residents are included. It is, however, well below an ideal of 89 primary care physicians per 100,000 population suggested in a Medical Economics survey of leaders in various medical specialties. The ratio is, however, well above the 1972 ratio of 50.6 primary care physicians per 100,000 population which excluded interns and residents. The DHEW analysis for the Senate Health Subcommittee would thus produce a picture of "need" well above estimates based on lower physician-to-population ratios and well below those based on professionally determined "ideal" ratios.

Medical manpower "shortages" are a reflection of many factors, including population density and per capita income, as well as a variety of professional, social and environmental factors. States with low population density, low per

capita income and a high percentage of poor people tend to have low physician/population ratios (Table II).

Idaho is a state with a physician-to-population ratio of 86.1 physicians per 100,000 population and a primary care physician-to-population ratio of 49.1 per 100,000 people. Both ratios are below those used by DHEW to estimate "need" for the Senate Health Subcommittee and well below national averages. Despite this, the National Health Service Corps identified only two counties as critical health manpower shortage areas. The Director of the State Department of Public Health has recently stated that he does not believe that a physician shortage exists in Idaho.

Wyoming presents a similar picture: a mountain state of low population density, a total physician-to-population ratio of 89.9 physicians per 100,000 population and a primary care physician-to-population ratio of 48.6 per 100,000. Yet, only three counties were determined to include critical health manpower shortage areas.

Urban states with high population densities have relatively few critical health manpower shortage areas based on the criteria established by the National Health Service Corps. Connecticut has one county with shortages; Massachusetts and New Jersey have none.

The use of nurse practitioners and physicians' assistants could potentially alter the need for physicians in underserved areas. The extent to which training programs for nurse practitioners and physicians' assistants are supported, the extent to which sufficient financial incentives are provided physicians to work with them and resolution of state licensure problems will determine whether these new practitioners will assume a significant role in the future.

TABLE II

8.

| United States           | # of Counties | 1970 Pop.  | Pop. Density per sq mi. | Per Capital Income | % Poor | % Poor Rural | Act. Non-Fed. Phys. (1972)<br>Phys. prov. patient care |              |                    |
|-------------------------|---------------|------------|-------------------------|--------------------|--------|--------------|--|--------------|--------------------|
|                         |               |            |                         |                    |        |              | per 100,00   | Primary care | Exc. inter. & res. |
| United States           |               |            |                         |                    |        |              | Total  | total        |                    |
|                         |               |            |                         |                    |        |              | 128.6  | 60.0         | 50.6               |
| <b>New England</b>      |               |            |                         |                    |        |              |  |              |                    |
| Connecticut             | 8             | 2,951,000  | 620                     | \$4,231,<br>(1st)  | 7.9%   | 18.8%        | 166.1  | 71.4         | 58.6               |
| Maine                   | 16            | 963,000    | 32                      | \$2,857<br>(36)    | 20%    | 59.8%        | 98.1   | 45.2         | 43.7               |
| Mass.                   | 14            | 5,431,000  | 676                     | \$3,796<br>(9th)   | 10.1%  | 14.9%        | 177.2  | 76.2         | 57.8               |
| N. H.                   | 10            | 699,000    | 78                      | \$3,268<br>(24th)  | 11.4   | 48.4         | 118.2  | 56.8         | 51.9               |
| R. I.                   | 5             | 883,000    | 863                     | \$3,537<br>(13)    | 13.4   | 13.6         | 146.3  | 67.0         | 54.4               |
| Vermont                 | 14            | 424,000    | 46                      | \$3,017<br>(30)    | 19.3   | 71.6         | 150.2  | 72.9         | 60.8               |
| <b>Mid Atlan.</b>       |               |            |                         |                    |        |              |  |              |                    |
| N. J.                   | 21            | 7,020,000  | 942                     | \$3,907<br>(7th)   | 8.8    | 15.4         | 128.4  | 60.5         | 53.5               |
| N. Y.                   | 62            | 18,040,000 | 378                     | \$4,133<br>(2nd)   | 11.3   | 17.1         | 197.8  | 88.8         | 67.3               |
| Penn.                   | 67            | 11,709,000 | 260                     | \$3,409<br>(17th)  | 14.4   | 34.4         | 132.3  | 60.4         | 49.7               |
| <b>South Atlan.</b>     |               |            |                         |                    |        |              |  |              |                    |
| Delaware                | 3             | 525,000    | 270                     | \$3,888<br>(8)     | 12.9   | 47.5         | 122.2  | 60.7         | 53.1               |
| Florida                 | 67            | 6,048,000  | 114                     | \$3,081<br>(28)    | 21%    | 32.7%        | 123.7  | 53.8         | 47.0               |
| Georgia                 | 159           | 4,452,000  | 79                      | \$2,743<br>(39)    | 30.4%  | 14.1%        | 98.5   | 46.4         | 40.4               |
| Md.                     | 23            | 3,677,000  | 381                     | \$3,712<br>(10)    | 13.1   | 37.9         | 155.6  | 73.5         | 55.5               |
| N. C.                   | 100           | 5,006,000  | 105                     | \$2,606<br>(43)    | 32.2%  | 70.5         | 97.0   | 49.1         | 42.1               |
| S.C.                    | 46            | 2,589,000  | 46                      | \$2,339<br>(47)    | 36.5   | 68.4         | 84.1   | 43.5         | 39.4               |
| Va.                     | 96            | 4,412,000  | 115                     | \$3,049<br>(30)    | 23.3   | 48.7         | 112.5  | 54.3         | 46.9               |
| West Va.                | 55            | 1,801,000  | 75                      | \$2,491<br>(46)    | 31.1   | 76.8%        | 94.3   | 45.1         | 40.2               |
| <b>East So. Central</b> |               |            |                         |                    |        |              |  |              |                    |
| Ala.                    | 67            | 3,552,000  | 70                      | \$2,329<br>(48)    | 34.9   | 57.6         | 81.1   | 40.7         | 36.4               |
| Ky.                     | 120           | 3,160,000  | 81                      | \$2,597<br>(44th)  | 29.7%  | 71.7%        | 93.4   | 46.9         | 42.1               |



| United States | # of Counties | 1970 Pop.  | Pop. per sq. mi. | Per Capital Income | % Poor | % Poor Rural | 9. Act. Non-Fed. Phys. (1972) Phys. prov. pat. care per 100,000 |              |                  |
|---------------|---------------|------------|------------------|--------------------|--------|--------------|---|--------------|------------------|
|               |               |            |                  |                    |        |              | Total   | Primary care |                  |
|               |               |            |                  |                    |        |              |   | Tot.         | Exc. int. & res. |
| Miss.         | 82            | 2,321,000  | 50               | \$2,057 (50)       | 45.9   | 73.1         | 75.1  | 40.8         | 37.4             |
| Conn.         | 95            | 3,940,000  | 95               | \$2,553 (45)       | 31.6%  | 59.4         | 102.1   | 46.5         | 40.3             |
| Mountain      |               |            |                  |                    |        |              |   |              |                  |
| N. Dak.       | 14            | 1,631,000  | 15               | \$2,983 (32)       | 17.7%  | 59.7         | 124.4   | 57.7         | 48.7             |
| Idaho         | 63            | 1,986,000  | 20               | \$3,371 (20)       | 14.2%  | 47.3%        | 142.1   | 64.4         | 55.5             |
| W. Dak.       | 44            | 699,000    | 9                | \$2,728 (40)       | 15.8%  | 59.7         | 86.1  | 49.1         | 49.1             |
| Montana       | 56            | 686,000    | 5                | \$2,917 (33)       | 16.3   | 61.2         | 97.5  | 51.1         | 51.1             |
| Nebraska      | 17            | 439,000    | 4                | \$3,992 (6th)      | 7.3    | 39.4         | 101.1   | 43.5         | 43.1             |
| New Mex.      | 32            | 990,000    | 8                | \$2,695            | 24.3   | 51           | 96.5  | 43.8         | 37.3             |
| Utah          | 29            | 1,029,000  | 13               | \$2,810 (37th)     | 12.0   | 34.3         | 125.7   | 57.0         | 44.7             |
| Wyoming       | 23            | 311,000    | 3                | \$3,139 (27th)     | 13.8   | 47.9         | 89.9  | 48.6         | 48.6             |
| Pacific       |               |            |                  |                    |        |              |   |              |                  |
| Alaska        | 10            | 240,000    | 0.5              | \$4,124 (3rd)      | 12.5%  | 78.8         | 74.7  | 40.0         | 40.0             |
| Cal.          | 58            | 18,918,000 | 125.0            | \$4,012 (4th)      | 10.2%  | 17.6%        | 166.4   | 76.8         | 67.6             |
| Hawaii        | 4             | 727,000    | 120.0            | \$3,514 (14)       | 12.7   | 31.8         | 140.1   | 66.4         | 61.0             |
| Oregon        | 36            | 2,003,000  | 18.0             | \$3,325 (22)       | 13.7   | 45.3         | 127.2   | 58.4         | 53.0             |
| W. Va.        | 39            | 3,204,000  | 49               | \$3,076 (11th)     | 11.8   | 38.6         | 131.5   | 61.6         | 55.3             |

| United States    | # of Counties | 1970 Pop.  | Pop. Density per sq mi. | Per Capital Income          | % Poor | % Poor Rural | 10.  |       |                  |
|------------------|---------------|------------|-------------------------|-----------------------------|--------|--------------|--|-------|------------------|
|                  |               |            |                         |                             |        |              | Act. Non-Fed. Phys. (1972)                           |       |                  |
|                  |               |            |                         |                             |        |              | Phys. prov. patient care per 100,000 // Primary care |       |                  |
|                  |               |            |                         |                             |        |              | Total  | Total | Exc. int. & res. |
| West So. Central |               |            |                         |                             |        |              |  |       |                  |
| Ark.             | 75            | 1,976,000  | 38                      | \$2,304 (49)                | 38.5   | 18.5         | 80.5   | 41.5  | 38.9             |
| La.              | 64            | 3,678,000  | 83                      | \$2,615 (42)                | 31.7   | 48.7         | 104.4  | 47.7  | 42.3             |
| Okla.            | 77            | 2,475,000  | 37                      | \$2,860 (35)                | 24.6   | 50.1         | 89.2   | 42.9  | 39.9             |
| Texas            | 254           | 10,789,000 | 42                      | \$3,016 (31)                | 24.8   | 33.3         | 106.2  | 50.7  | 44.7             |
| East N. Central  |               |            |                         |                             |        |              |  |       |                  |
| Ill.             | 102           | 10,934,000 | 196                     | \$3,994 (5 <sup>th</sup> )  | 12.9   | 28.6         | 120.9  | 58.1  | 48.7             |
| Ind.             | 92            | 5,051,000  | 140                     | \$3,421 (16 <sup>th</sup> ) | 14.4   | 42.6         | 93.0   | 47.4  | 43.1             |
| Mich.            | 83            | 8,720,000  | 153                     | \$3,674 (12)                | 13     | 32.2         | 112.8  | 51.3  | 40.6             |
| Ohio             | 88            | 10,564,000 | 261                     | \$3,487 (15)                | 13     | 34.1         | 118.4  | 55.6  | 46.6             |
| Wis.             | 72            | 4,218,000  | 77                      | \$3,407 (18)                | 13     | 54.7         | 109.6  | 52.2  | 45.9             |
| West N. Cen.     |               |            |                         |                             |        |              |  |       |                  |
| Iowa             | 99            | 2,771,000  | 49                      | \$3,391 (13 <sup>th</sup> ) | 18.7   | 64.9         | 90.2   | 46.6  | 41.6             |
| Ka.              | 105           | 2,266,000  | 28                      | \$3,333 (21)                | 16.5   | 48.6         | 100.8  | 48.3  | 44.0             |
| Minn.            | 87            | 3,642,000  | 46                      | \$3,318 (23)                | 16.1   | 62.7         | 128.8  | 63.0  | 51.8             |
| Mi.              | 114           | 4,583,000  | 67                      | \$3,220 (25)                | 20.7   | 50           | 114.1  | 51.7  | 41.8             |
| Neb.             | 93            | 1,424,000  | 19                      | \$3,220 (25)                | 18.8   | 63.9         | 100.6  | 54.7  | 47.1             |
| N.Da.            | 53            | 614,000    | 9                       | \$2,808 (38)                | 22.9   | 81.1         | 84.0   | 43.0  | 43.0             |
| S.Da.            | 67            | 651,000    | 9                       | \$2,916 (34)                | 17.4   | 78.1         | 71.4   | 40.0  | 40.0             |

The problem of defining an underserved area is complicated by the major role of foreign medical students in providing health services, particularly in urban public hospitals, state mental hospitals and in Veterans Administration hospitals that are not affiliated with medical schools. In 1973-74 there were over 18,000 FMGs in internships and residencies and an additional 50,000 FMGs in patient care, teaching, research and other medically related activities. Requiring FMGs to take the same qualifying examination for entrance into graduate training which is taken by U.S. medical graduates is likely to substantially reduce their numbers in residency programs. This, in turn, could create serious shortages in urban areas, particularly in the northeastern United States. It is possible that as many as 80 percent or more of the future FMGs applying to enter the United States for training will be unable to meet the new examination requirements. Such a limitation on the flow of FMGs might translate into a shortage of up to 14,000 physicians. Based on present distribution patterns among specialties, approximately 40 percent of these positions would be in primary care specialties.

FMGs have also been identified as major providers of care in state mental hospitals. It is even more difficult to predict the impact of changes in federal law upon this group of health professionals. Less data is available on the numbers and status of FMGs in these institutions. Special and temporary state licensure laws afford opportunities to FMGs who might not otherwise have been able to practice in the United States. These institutions are presumed to have absorbed substantial numbers of FMGs (who had not met current qualifying standards for graduate training) in various capacities other than "physician." The tasks performed by this group of FMGs can only be speculated. Projecting the loss to the state hospitals by a reduction in FMGs must account for all of these variables.



Rural Underserved Areas

Rural underserved areas vary greatly from one part of the country to another in the demographic and cultural characteristics of people living in the area, the extent of poverty, the importance of climatic factors, geography, the size of communities and the local resources that can be brought to bear on the problems.

No state equals Alaska in its per capita income, yet because of its weather, the employment opportunities, the styles of life that are possible there and the extremely low density of the population, it has the lowest ratio of physicians to population in the nation. Its ratio is less than one half the national average and its ratio of primary care physicians to population, including interns and residents, is also the lowest in the nation.

The Mountain States of Arizona, Colorado, Idaho, Montana, New Mexico, Utah, Nevada and Wyoming are characterized by low population density, per capita incomes (except for Nevada) that rank from 20th to 42nd among all states, a relatively small percentage (7.3%-17.7%) of the population who are poor (except for New Mexico) and physician to population ratios (except for Colorado) that are below the national average. Yet, in many of these states, physician shortages are not considered serious.

Idaho is thought to have a shortage of physicians in general and of primary care physicians. This estimate is based on the statewide ratio of physicians to population. Yet the National Health Service Corps identified only two counties in Idaho as critical medical shortage areas and the Director of the State Department of Public Health recently stated that he does not believe there is a physician shortage of any major importance in Idaho.

Wyoming presents a similar picture, with a low statewide ratio of primary care physicians to population. If Wyoming's needs were estimated on the basis of its statewide ratio of physicians to population, it would require almost 100 physicians,

30% more than are practicing in the state today, to bring its ratio up to the national average.

Its real needs, however, seem to be well below that national average. In two of the three counties identified by the National Health Service Corps as critical medical shortage areas the needs are indeed great. In one county there was only one physician to care for 4,535 people. In another, one physician for 2,924.

Nevada, which had a lower ratio of primary care physicians to population than either Idaho or Wyoming in terms of aggregate supply, seems well on the way to solving its physician shortage. The new medical school has actively recruited students from shortage areas. Communities have actively provided loans to students from these communities with the proviso that they will return home after their training. More and more physicians seem to be attracted to the state. In September of 1975, 55 physicians were approved for licensure in Nevada - a number equal to almost 10 percent of the state's total supply. Of the 55, only 14 were in primary care specialties and only 5 planned to practice outside of Las Vegas or Reno.

In a recent study of 14 rural counties in Nevada currently served by 31 physicians it was estimated that approximately 44 physicians would be needed, and could be supported on a fee for service basis. To meet the need, these physicians would have to provide 7,537 patient visits per year. According to estimates published by the American Medical Association, the average number of office visits per office based patient care physician in 1970 was 4,820. Rural physicians work longer hours, they see more patients per hour, and they often work more days per year than their urban counterparts, but 7,500 visits per year is very high. Using that figure, however, it was estimated that there was a shortage of 13 physicians in the 14 rural Nevada counties. It was estimated that 441,875 physician visits were generated in these rural counties and if the number of visits per physician

was equal to the national average, 92, rather than 44, would be needed. This number far exceeds the number that could be supported in those areas.

Just as each of these outain tates differs in terms of physician shortage and approaches to the problem, so do other states differ. Although we have not conducted a detailed analysis, it is evident that the South Atlantic States (Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia), the East South Central States (Alabama, Kentucky, Mississippi and Tennessee) and the West South Central States (Arkansas, Louisiana, Oklahoma and Texas) have the most serious problems, with low per capita incomes, a relatively large percentage of the people who are poor (24.6% to 45%, except for Maryland and Delaware), a large percentage of the poor in rural areas (32.7% to 70%) and, except for a few states, low physician to population ratios. In parts of the South - Georgia, Alabama, South Carolina and Mississippi - rural counties have only 28 physicians per 100,000 population compared to the overall national average of 156 per 100,000.

California presents still a different pattern. The state has one of the highest physician to population ratios in the nation, but it has rural and urban areas where access to care is severely limited. Isolated rural areas have less than one half the number of physicians per 100,000 population than are located in the greater metropolitan areas (table 3). The data from California illustrate the fact that general and family practitioners are relatively evenly distributed while internists and pediatricians settle primarily in metropolitan areas.



Table 3

NUMBER AND RATIO PER POPULATION OF ACTIVE NONFEDERAL PHYSICIANS BY GEOGRAPHIC AREA AND MEDICAL SPECIALTY (PREDOMINATELY PRIMARY CARE), CALIFORNIA, JULY 1969

| Specialty  | Greater Metropolitan |       | Lesser Metropolitan |       | Adjacent |       | Isolated Semirural |       | Isolated Rural |       |
|--|----------------------|-------|---------------------|-------|----------|-------|--------------------|-------|----------------|-------|
|  | No.                  | Ratio | No.                 | Ratio | No.      | Ratio | No.                | Ratio | No.            | Ratio |
| Internal Medicine, Pulmonary Diseases, Gastroenterology, Allergy, Cardiovascular Disease | 3,666                | 31.6  | 1,279               | 19.7  | 133      | 10.0  | 40                 | 8.0   | ---            | ---   |
| Pediatrics, Pediatric Allergy, Pediatric Cardiology                                      | 1,402                | 12.1  | 575                 | 8.9   | 55       | 4.1   | 8                  | 1.6   | ---            | ---   |
| Obstetrics and Gynecology  | 1,302                | 11.2  | 600                 | 9.2   | 69       | 5.2   | 20                 | 4.0   | ---            | ---   |
| General Practice   | 4,641                | 40.0  | 2,231               | 34.4  | 640      | 48.0  | 263                | 52.6  | 15             | 66.7  |
| Total Primary Care <sup>b</sup>  | 11,011               | 94.9  | 4,685               | 72.2  | 897      | 67.3  | 331                | 66.2  |                | 66.7  |
| Total All Physicians   | 21,977               | 189.4 | 9,171               | 141.3 | 1,433    | 109.9 | 561                | 112.2 | 17             | 75.6  |
| Primary Care % of Total <sup>b</sup>   | 50.1                 |       | 51.1                |       | 61       |       | 59                 |       |                | 88    |
| General Practice % of  |                      |       |                     |       |          |       |                    |       |                |       |
| Total  | 21                   |       | 24                  |       | 44       |       | 47                 |       |                | 88    |

SOURCE: California Medical Association: Bureau of Research and Planning. *Characteristics and Distribution of Physicians in California*, June - July, 1969. February 1970.

It is not sufficient, however, to examine a state as large as California in such gross terms. Fresno County illustrates the urban/rural problem. This is a county of about 7,000 square miles with 500,000 population that is in the heart of the San Joaquin Valley, one of the nation's richest agricultural areas. The county is served by 547 physicians. Of the 547 physicians, 474 (86%) practice in the Fresno metropolitan area, while only 73 practice in the non-metropolitan or rural parts of the county. Among the general practitioners, 90 practice in the Fresno metropolitan area and 54 in the rural areas. Among the 403 specialists only 19 practice outside of the Fresno metropolitan areas.

How many people in the country are underserved as a result of this maldistribution? The data on ratios, even at this level of analysis, will not reveal that. Because of this, a group for the University of California, San Francisco under the direction of Drs. Werdegard and Abbott have developed the concept of the medical service area in order to better define the problems. The proposed medical service areas are one or more Census County Divisions combined according to the following criteria:

- A medical service area should have a population base of at least 10,000 persons and contain one major place of at least 2,000.
- Inhabited areas within a proposed medical service area should be within 30 miles or one hour's driving time from a major place in the area.
- If possible, the proposed medical service area should contain at least one acute hospital.
- Major access roads and traffic patterns.
- Available wisdom as to relationships between communities and surrounding areas.
- If possible, county lines should be preserved.

Using these criteria, the group at UCSF are in the process of analyzing data from the 30 medical service areas in the San Joaquin valley to attempt to better define needs and physician shortage areas.

The State Department of Public Health has also undertaken an analysis of data in order to specify areas that are underserved in terms of primary care. They have analyzed data on the basis of counties and census tracts, and they used the following criteria to define critical shortage areas and underserved primary care areas.

- 1) geographic location or remoteness from physicians and/or appropriate medical facilities;
- 2) age distribution of the population (e.g. percent 65 years of age and older and percent five years of age and younger);
- 3) race or ethnic identity;
- 4) physicians to population ratio for primary care physicians and total physicians providing patient care;

- 5) the designation of primary care physician scarcity areas used by the Secretary of Health, Education and Welfare, Section 1302 (7) of the Public Health Service Act and portions of the National Health Service Corps listing of medically underserved areas.

Based on estimated 1973 population data, it was estimated that roughly 22 percent of the population of California is in need of additional primary care physicians. The statewide results reveal more underserved areas than would be the case if just physician to population ratios were utilized.

The analysis of physician shortages for the Senate Health Subcommittee provided by the Department of Health, Education and Welfare further illustrate the difficulty of defining underserved areas and physician shortages. People can be underserved by barriers to access, even when the supply of physicians is adequate.

The DHEW analysis revealed physician shortages in 312 of the 510 state economic areas, when the criteria of shortage was fewer than 100 physicians per 100,000 population. Using 65 primary care physicians per 100,000 population as the base, the number of shortage areas increases to 432 of the 510 state economic areas. In terms of numbers this added up to 24,862 physicians.



Urban Underserved Areas

Projecting the needs of urban underserved areas presents a different set of difficulties. The information currently available on urban underserved areas is very limited. During the past few years, the attention of social scientists and policy makers has focused primarily on identifying and redressing health manpower deficiencies in rural areas. Among the few studies conducted in urban areas, the analysis of Chicago by Dewey is the one most often referred to. Projecting national urban needs based on the analysis of Chicago's underserved inner city areas, the Senate Health Subcommittee staff estimated an urban shortage of approximately 10,000 physicians.

Criteria originally developed to detect rural health manpower deficiencies often are not appropriate for identifying urban underserved populations. Since the underserved areas are usually pockets within adequately supplied--or even oversupplied--urban areas, the criteria applied must account for very different factors than physician/population ratios in order to identify underserved populations within the urban setting.

The criteria utilized by the California State Department of Public Health to identify underserved areas produced some interesting results. Several census tracts in San Francisco were defined as underserved in spite of the fact that the city has 481 physicians per 100,000 population and 184.4 primary care physicians per 100,000 population. As this example points out, when discussing urban physician requirements, it is perhaps more appropriate to talk of underserved populations than underserved areas. The factors which limit accessibility of these populations, and thus cause them to be identified as underserved, involve a complex array of socio-economic and cultural problems associated with urban inner city life which are often more compelling than the

unavailability of health professionals and other health resources.

Any equation for estimating health manpower needs of these populations must include variables for each of these factors limiting accessibility. In San Francisco, the unavailability of physicians is not the cause of inaccessibility to services to those S.F. populations defined as underserved. Lack of adequate, affordable transportation is often a more limiting factor than distance in urban areas. Cultural barriers, language barriers, poverty, red tape of third party reimbursement, fear or ignorance of the bureaucracies which must be surmounted to receive care must all be recognized in the criteria for defining urban underserved areas or populations. The techniques for measurement and weighting of these variables and the significance of each are still an open and much debated subject. Until the problems of urban underserved populations are evaluated in this fashion, identifying these underserved groups and developing strategies for meeting their needs will achieve limited success.

#### Physician Productivity

The number of underserved urban and rural areas and the extent of the shortage of physicians will be determined by the criteria you choose to apply in defining what an underserved area is and what a physician shortage is. The problem is made more difficult because of marked regional differences in the productivity of physicians. For example, according to data analyzed by Professor Uwe Reinhardt of Princeton University, physicians in the East-South Central Region see an average of 8,408 patient visits per year, while those in New England see only 4,808. The East-South Central physicians employ almost twice as many auxiliaries as do their New England counterparts, and 19.4 percent are in group practice versus 9.3 of those in New England. Thus, a ratio that is applicable and appropriate in New England may prove to be

excessive in the East-South Central Region where there are more poor people and the populations have different characteristics.

Another fact that must be considered is that physicians practicing in cities of 5 million or more see an average of 124 patients per week, while those in cities of 50,000 to 499,999 see 194 patients per week. In the non-metropolitan areas the number rises to a high of 223 patients per week seen by physicians in towns of 10,000 to 24,999. The fees charged for an office visit by the physicians in the small towns averaged \$7.15 for an initial office visit. In the largest cities, the fee averaged \$10.34. As expected, the physician to population ratio also varied enormously. In the cities of 10,000 to 24,999, the physician to population ratio was 51 per 100,000 residents while it was 191 per 100,000 residents in cities of 5 million or more. In cities of 50,000 or more, it was 87 per 100,000 and in cities of 1,000,000 to 4,999,000, it was 150 physicians per 100,000 residents.

Physician productivity--not a factor considered in any of the formulas--is critical to meeting the needs in underserved areas. Marked improvements in this productivity could occur in the future if physicians were working more effectively with nurse practitioners and physicians' assistants. Professor Uwe Reinhardt has estimated that the number of M.D.s to serve a given population could be cut in half if physicians used two or three aids effectively. The cost to the consumer would also be reduced.

The task of making health care services accessible to all individuals confronts two equally complex and integrated problems: identifying underserved areas and populations and developing policies which will increase the availability and accessibility of services in these areas. If the criteria utilized to identify



underserved areas are sensitive to the complex array of factors which limit accessibility of these populations to health care services, they may suggest strategies for meeting the unique needs of various underserved groups. Defining underserved areas and predicting needs are one of the most challenging endeavors we face in the area of health manpower policy. This challenge must be met, however, if we are to develop a sound national policy relating to the geographic distribution of health professionals.

Excerpt from Statement by

Philip R. Lee, M.D.

before the

Subcommittee on Health and the Environment  
Committee on Interstate and Foreign Commerce  
House of Representatives

February 20, 1975

Foreign Medical Graduates

In addition to the rapid increase in the graduates of United States medical schools during the past decade, there has also been a great increase in the number of graduates of foreign medical schools in training and practice in the United States. (Appendix two provides a statistical summary of the FMG situation in the U.S., including Table 6 which shows this increasing number of FMG's). Some have looked upon immigration of foreign medical graduates as an important source to meet health care needs in the United States. It has been shown that most of the increase in the ratio of physicians to population is due to the influx of foreign medical

graduates. Increases in production of United States medical graduates alone would have only kept pace with population growth, not raised the ratios. I would encourage the Committee to look at the data on foreign medical graduates and then decide on a course of action which is more appropriate than developing projections which heavily rely on the continued flow of foreign medical graduates into the United States.

In discussing the issue of foreign medical graduates, it is first necessary to place the issue in a historical context. The history is important because it indicates, to some extent at least, why we are where we are, and it suggests what can be done.

Prior to the Second World War there were few graduates of foreign medical schools taking advanced training in the United States. In 1946 Senator Fulbright introduced amendments to the Surplus Property Act of 1944 that provided for an international educational exchange, including support for foreign students to come to the United States to study. In 1948 the United States Information and Education Exchange Act (Smith-Mundt Act) was enacted authorizing a fuller exchange program and creating the Exchange Visitor (J Visa) immigration category. This did not have much impact on medical school admissions, but it did bring an increasing number of foreign medical graduates into internship and residency programs which began to expand rapidly.



It was originally assumed that the students or trainees who came into the United States under exchange visitor programs would all be part of government-sponsored programs. Gradually the boundaries of eligible programs expanded until any sponsor could apply to the Secretary of State to obtain exchange visitor program status. The program was based on the premise that persons would come to the United States for training and then return to their homelands. They would not be brought in to meet U.S. health care needs.

House staff foreign medical graduates fell under the exchange visitor program because:

They were not considered to be coming to an established institution of learning--even if their program was affiliated--and therefore were not eligible for a student visa.

They did not fall under the H visa category which applied to persons with ability to perform a needed service in the United States.

The sponsoring institutions made the selection of exchange visitors in their programs. This became a popular vehicle for hospitals to bring in foreign medical graduates. By 1961 there were 2,735 exchange visitor programs and 1,300 of them were sponsored by hospitals. Many hospitals had previously expanded their capacity to provide training for physicians who were returning from World War II. When the veteran population declined, the hospitals needed a new source of trainees--and this was to be the foreign medical graduate. The number of foreign medical graduates

doubled between 1950 and 1952. It doubled again by 1958 and again by 1967 to fill the expanding number of approved internships and residencies.

The Educational Council for Foreign Medical Graduates was established in 1957 to certify the basic qualification of foreign medical graduates to enter training. The ECFMG was not officially recognized by the Immigration and Naturalization Service and physicians could still enter the country without holding the minimal criteria of adequacy as defined by the American medical profession.

By 1960 the concerns of the Nation regarding exchange visitor programs turned from national security to U.S. manpower shortages and the "Brain Drain" from foreign countries.

The guidelines for admitting foreign medical graduates were often changing and were very flexible so that waivers to the law were considered more the rule than the exception.

Before, 1965, immigrating physicians were included in the U.S. quota for total immigration from their home country. The exchange visitor program was not subject to national quotas and was thus used as a vehicle for many foreign medical graduates to come into the United States. The 1965 act abolished the system of quotas based upon national origin--in a transitional process which would last two and one half years. By 1968, the quotas were distributed on a first-come, first-served basis with special preference and nonpreference categories.

Foreign physicians fell under two of the preference categories: Members of professions or persons with exceptional abilities in science and art; and persons with skills which are in short supply in the United States (Table 2, Appendix two).

With the new quota system, the allocation of immigrants from Asian countries was enlarged from what it had been under national quotas. The mix of immigrants changed both nationally and for foreign medical graduates. Before WWII the flow of physician migrants was small and primarily from advanced to developing countries. Since 1946, the flow has reversed with d eveloping countries now losing health manpower to developed countries.

Prior to the 1965 immigration amendments, almost 50 percent of FMG's entering the United States came from countries in the Western Hemisphere (28 percent from Europe) and only 10 percent from Asia. In 1972, 70 percent of the FMG immigrants came from Asian countries (Tables 3 and 4, Appendix two). The major countries of origin for these foreign medical graduates are India (representing 18% of all FMG's), the Philippines (14%), and Korea (7%). While the United States enjoys a physician-population ratio of 158 physicians per 100,000 population, India has 20 physicians, the Philippines has 75 and Korea estimates 37 physicians for every 100,000 individuals. Despite the limitations of international comparisons and the need to address questions of distribution, these figures indicate a significant disparity between the professional



resources of the United States and the countries from which it receives its FMG's.

In 1965, the Labor Department determined that there was a physician shortage in the United States, thus easing entry of foreign medical graduates into this country. This determination allowed physicians to apply to the Immigration and Naturalization Service for a visa without first applying for Labor Department clearance. The change in the Immigration Law in 1965 had allowed those foreign medical graduates entering the United States for training to obtain an immigrant visa rather than an exchange visitor visa, thus leaving them a broader spectrum of options when their training is completed.

For foreign medical graduates the distinction between immigrant status and exchange visitor status has been so blurred by waivers and exceptions that it is very easy for the foreign medical graduate to switch from one category to the other if forced to enter the United States as an exchange visitor.

The programs to recruit graduates of foreign medical schools for internship and residency positions began after the Smith-Mundt Act in 1948 and the creation of the exchange visitor (J visa) immigration category. By 1950, 722 graduates of foreign medical schools filled 10 percent of the available internships and 1,350 filled 9 percent of the available residencies. By 1952, the number of both interns and residents who were graduates of

foreign medical schools doubled; and, as a percentage of the available positions, their numbers rose to about 20-25 percent of the total, where it was to remain until 1965 (Table 5, Appendix two).

While the percentage of internship and residency positions filled by foreign medical graduates remained relatively stable, the numbers increased steadily, rising from 1,116 interns and 1,350 residents in 1950-51 to 2,361 interns and 9,133 residents in 1965-66 (Table 5, Appendix two). The great majority of these residents entered as exchange visitors (J visas) rather than as immigrants. Between 1962 and 1965, 17,285 foreign medical graduates entered as visitors and 8,151 entered as immigrants.

The same year that the Department of Labor determined that there was a physician shortage and eased the entry of foreign medical graduates into the United States, Medicare and Medicaid were enacted. Medicare and Medicaid increased the demand for services and also guaranteed hospitals reimbursement for the costs of interns' and residents' services provided to Medicare and Medicaid beneficiaries.

Following these events, the number of residency positions offered rose from 38,750 in 1964-65 to 51,658 in 1972-73. Of the 51,658 positions available now, only 45,081 are filled. The number filled in that period by foreign medical graduates rose from 8,153 to 14,471. (Table 5, Appendix two). The increase of 6,300 in 8 years was more than double the increase in the preceeding 8 years. Foreign medical graduates

represented 32 percent of all residents in 1972-73. In 1967, for the first time, the number of foreign medical graduates entering the United States exceeded the number of graduates of U.S. medical schools. It was not until 1971, however, that the number entering as immigrants exceeded the number entering as exchange visitors.

Several forces were at work: hospitals increasing the number of residency positions because payment for their services was assured; the Department of Labor declaring a shortage because of the unfilled positions; and increasing numbers of foreign medical graduates coming into those positions because the positions were available and they were permitted to come either as immigrants or under special J visas. Over the past 22 years, internships and residencies combined have increased 127 percent. During this same period, the number of medical school graduates has increased by 70 percent. In 1950-51 there were 28,734 approved training programs in United States hospitals. Sixty-eight percent were filled by U.S. and Canadian graduates, 7 percent by FMG's and 25 percent were vacant. In 1972-73 there were 65,308 positions, 58 percent of which were filled by U.S. and Canadian graduates. Twenty-eight percent were filled by FMG's and 14 percent were vacant. If only U.S. and Canadian graduates were available to fill these positions, 42 percent would have remained vacant.



Many hospitals have developed exchange visitor programs which entitle them to sponsor FMG's who wish to train in the United States. Unfortunately, the intention of the hospital is often more one of meeting staffing requirements to maintain the daily operation of the facility than one of providing a well planned and staffed education program. Sixty-seven percent of the positions filled by FMG's in 1972 were in programs not affiliated with a medical school. As long as the number of intern and resident positions far exceeds the number of American medical graduates, the incentive for bringing in large numbers of foreign medical graduates to fill vacant slots will remain.

No matter what the immigration status of a foreign medical graduate when (s)he enters the United States, many remain well beyond their anticipated stay. In 1971, J.S. Millis indicated that forty-three percent of FMG's entering the United States intended to remain here. (21). Data from the AMA registry shows that 84 percent of the FMG's identified in the registry as residing in the United States in 1963 were still residing in the U.S. in 1971. For those FMG's who were in training status in the United States in 1963, 74 percent were residing in this country eight years later.

The issue of foreign medical graduates does not simply arise because of the numbers entering the United States or their countries of origin. The fact is, however, that this great influx of foreign medical graduates

has contributed very little to solving the critical problems of geographic maldistribution of physicians and the relative shortage of physicians in primary medical specialties.

There are important differences in the role of FMG's and the graduates of U.S. and Canadian medical schools that diminish their potential impact in meeting the health care needs in the United States, particularly the need for primary medical care. According to the Department of Health, Education and Welfare, only about one-third of all FMG's were in office based practice in 1970 as compared with about two-thirds of the active physician graduates of U.S. and Canadian medical schools. Almost one-third of all FMG's were interns or residents, about  $2\frac{1}{2}$  times the proportion of Canadian and U.S. graduates. Adding to the interns and residents the FMG's who were full time physicians on hospital staffs, 50 percent of all FMG's were hospital based as contrasted to 23 percent of U.S. graduates and 21.8 percent of Canadian graduates (Table 8, Appendix two).

Within the aggregate supply there were substantial differences in the activities of physicians from European and Asian countries. The FMG's from Europe and other developed countries had an activity distribution similar to U.S. and Canadian graduates while two-thirds of FMG's from Asian and other developing countries were hospital based. Increasing numbers of FMG's are coming to the U.S. from Asian countries.

Most of the foreign medical graduates in residency training seem to be distributed much as the American medical school graduates' residencies are distributed. More important, when it comes to practice, where do they go? Well, they largely practice where the graduates of American medical schools practice. They largely practice in the States with the highest physician-to-population ratio. FMG's are disproportionately located in the New England, Middle Atlantic and East Central regions of the United States. Well over one third of all FMG's are located in New York, New Jersey and Pennsylvania. Although FMG's represent only 17 percent of all physicians in the United States, they represent over 25 percent of physicians in New York, Rhode Island, New Jersey, Illinois and Delaware (Table 10, Appendix two).

For instance, the 10 states with the largest number of foreign medical graduates in practice have 137.5 physicians per 100,000 population in office-based practice while the 10 states with the lowest number of foreign medical graduates have only 86.1 per 100,000 population in . The national average was 122 in 1970, the year this data was gathered.

For the United States as a whole, 14.9 percent of practicing physicians were foreign medical graduates in 1962. In nonmetropolitan areas the percentage was 8.6 and in metropolitan areas it was 16.1 percent. A similar pattern was still evident in 1970 (Table 11, Appendix two). In other words, the foreign medical graduates don't contribute to a solution



to the maldistribution problem.

An examination of specialty choices by foreign medical graduates is also of interest. In some specialties, such as physical medicine, anesthesiology, and pathology, the percentage of foreign medical graduates exceeds the average for U.S. graduates. The primary care specialties have about one-third of the residency positions filled by foreign medical graduates. This percentage is similar to the number occupied by U.S. graduates (Table 9, Appendix two).

The issue most often advanced in the debate regarding FMG's is the difference in training and background between American and foreign medical graduates and the influence of this difference on quality of care. The United States medical graduate (USMG) brings to a graduate program basic medical knowledge and a substantial amount of clinical experience. (S)he is capable of reaching diagnostic conclusions from the time (s)he enters the program. Since the USMG was educated in an American institution (s)he understands the ethics and the cultural and social patterns within the American hospital setting. (S)he is able to learn quickly from his/her peers because (s)he already feels comfortable in the clinical surroundings and, besides speaking English, understands non-verbal communication among the hospital personnel. The problem for the FMG is further aggravated by the fact that many either speak English poorly or not at all when they enter residency programs.

In contrast, the ability of the foreign medical graduate to become an integrated member of a graduate program is inhibited by a combination of performance characteristics and external forces. The majority of FMG's who enter the United States residency programs have had minimal clinical experience. The FMG's often have acquired less medical knowledge than their American counterparts, as well. The disparity in medical knowledge between the USMG and the FMG can be illustrated by FMG performance on the Educational Council for Foreign Medical Graduates (ECFMG) medical knowledge examination and on state licensing examinations. It is projected that the questions included in the ECFMG exam could be answered correctly by ninety-eight percent of the United States 4th year medical students. Roughly forty percent of the FMG's taking the exam pass the first time. Ultimately sixty-six percent pass the test; however, the majority of those who pass score only slightly above the minimum passing grade.

Current procedures for certifying FMG's have created a system of dual standards for admission to graduate medical education in the United States. The quality of the American medical school graduates' education and performance is based on a series of indicators including accreditation of educational programs, national medical college admissions, tests and other standards for entrance, faculty evaluation, and Parts I and II of the National Board Examination. In contrast, the Educational Council for Foreign Medical Graduates bases its certification on only

two criteria:

--fulfillment of all requirements of a medical school listed in the World Dictionary of Medical Schools published by the World Health Organization;

--an examination constructed by the National Board of Medical Examiners.

This dual standard of admissions criteria supports a dual standard of quality as well. The ECFMG examination does not provide an adequate measure of professional competence. The performance of FMG's on the examination compares poorly with USMG performance on the same questions. The Task Force of Foreign Medical Graduates of the Association of American Medical Colleges has reiterated the recommendation that all applicants for admission to U.S. graduate medical programs be required to pass the same qualifying examinations. Such a requirement would have the effect of reducing the number of FMG's to those whose performance was at a level equivalent to USMG's. The results of the Federation Licensure Examination (FLEX) of the Federation of State Medical Boards, which is now utilized as the state licensure examination by nearly all of the states, show a similar disparity. For the FLEX examinations given between June 1968 and December 1972, eighty-five percent of USMG's passed, while only fifty percent of the FMG's attained a passing score.

An increasing number of FMG's are taking the ECFMG examination in the United States and are therefore not certified before entering the U.S.



They form a medical underground of persons working in the health professions without certification. Many of these persons have direct patient care responsibilities. Recently, Weiss and his associates estimated that, in addition to the approximately 10,000 unlicensed physicians determined by the AMA to be working in the health field, another 9,000 were so occupied. The Weiss study also indicated that many of these individuals have direct patient care responsibilities and, because of their background, often perform medical or surgical procedures for which they have not been licensed (Tables 12 and 13, Appendix two).

Finally, there is the growing number of U.S. citizens who have not gained admission to medical school in the United States, and have entered foreign medical schools. The numbers have increased from 1,730 in 1954-1955 to 3,368 in 1969-70, and I am sure the figure is higher today. Many of the students met the admission requirements for the U.S. medical schools but were not admitted because of insufficient numbers of places. Some of these students receive a medical education which is comparable to that in the United States. However, all too many of the students are receiving a less than adequate education. This problem is clearly illustrated by the fact that United States citizens who graduate from foreign medical schools perform as poorly as FMG's on qualifying examinations for residency training and licensing.

APPENDIX TWOSummary of the Foreign Medical GraduateSituation in the United States\*

The attached charts provide a numerical summary of the foreign medical graduate situation in the United States. They include:

Table 1 - Foreign Physicians Admitted to the United States in Comparison with the Number of U.S. Medical Graduates, 1962-1973.

Table 2 - Number of Physicians Admitted to the United States Each Year, 1969-1973, by Visa Status at the Time of Admission.

Table 3 - Number of Foreign-Trained Physicians in the United States, by Geographic Region of Graduation: December 31, 1970.

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Table 11 - Foreign Medical Graduates in Metropolitan and Nonmetropolitan Areas of the United States, by Region of Origin, 1970.

Table 12 - Medical Underground: Physician Manpower in the United States, 1971.

Table 13 - Estimated Number of Immigrant Physicians Unknown to AMA by Year of Admission to U.S.

\* These tables are to supplement and update the summary on foreign medical graduates which I submitted to this committee in May 1974 and which appear on pages 368-379 of the Health Manpower and Nurse Training--1974 record of hearings held before the Subcommittee on Public Health and Environment.



| Foreign physicians admitted to the United States in comparison with number of U.S. medical graduates, 1962-1973 <sup>a</sup> * |                        |                                 |            |                                |                     |
|--|------------------------|---------------------------------|------------|--------------------------------|---------------------|
| Fiscal Year  | U.S. Medical Graduates | Foreign Physicians <sup>b</sup> |            |                                |                     |
|  |                        | Total                           | Immigrants | Nonimmigrant Exchange Visitors | Other Nonimmigrants |
| Total  | 97,809                 | 101,066                         | 43,059     | 55,360                         | 2,617               |
| 1962   | 7,168                  | 5,767                           | 1,797      | 3,970                          | — <sup>c</sup>      |
| 1963   | 7,264                  | 6,730                           | 2,093      | 4,637                          | —                   |
| 1964   | 7,336                  | 6,767                           | 2,249      | 4,518                          | —                   |
| 1965   | 7,409                  | 6,172                           | 2,012      | 4,160                          | —                   |
| 1966   | 7,574                  | 6,922                           | 2,552      | 4,370                          | —                   |
| 1967   | 7,743                  | 8,397                           | 3,326      | 5,204                          | 367                 |
| 1968   | 7,973                  | 9,125                           | 3,128      | 5,701                          | 296                 |
| 1969   | 8,059                  | 7,515                           | 2,755      | 4,460                          | 299                 |
| 1970   | 8,367                  | 8,523                           | 3,158      | 5,008                          | 357                 |
| 1971   | 8,974                  | 10,947                          | 5,756      | 4,784                          | 407                 |
| 1972   | 9,551                  | 11,416                          | 7,143      | 3,935                          | 338                 |
| 1973   | 10,391                 | 12,285                          | 7,119      | 4,613                          | 553                 |

<sup>a</sup> Sources, unpublished data from the U.S. Department of Justice, Immigration and Naturalization Service; *J.A.M.A.* 226(8): 910, 1973.

<sup>b</sup> Including Canadians.

<sup>c</sup> Dash indicates data not available.

\* Source: Williams, Kathleen and Lockett, Betty, "Migration of Foreign Physicians to the United States: The Perspective of Health Manpower Planning." *International Journal of Health Services*, Vol. 4, No. 2 (1974) p. 217.

Table 2

Number of Physicians Admitted to the United States Each Year 1969-1973, by Visa Status at time of Admission\*

| Category                           | 1969  | 1970  | 1971  | 1972  | 1973  | Total, 1969-1973 |
|------------------------------------|-------|-------|-------|-------|-------|------------------|
| <i>Immigrant visas</i>             |       |       |       |       |       |                  |
| Third preference                   |       |       |       |       |       |                  |
| Admissions                         | 761   | 544   | 564   | 540   | 676   | 3,085            |
| Adjustments                        | 126   | 166   | 557   | 840   | 948   | 2,637            |
| Sixth preference                   |       |       |       |       |       |                  |
| Admissions                         | 69    | 84    | 90    | 44    | 17    | 304              |
| Adjustments                        | 40    | 46    | 273   | 247   | 88    | 694              |
| Total with occupational preference | 996   | 840   | 1,484 | 1,671 | 1,729 | 6,720            |
| Others                             | 1,760 | 2,318 | 4,272 | 5,473 | 5,390 | 19,213           |
| Total                              | 2,756 | 3,158 | 5,756 | 7,144 | 7,119 | 25,933           |
| <i>Nonimmigrant visas</i>          |       |       |       |       |       |                  |
| Distinguished merit and ability    | 62    | 83    | 178   | 231   | 350   | 904              |
| Other temporary                    | 20    | 100   | 47    | 25    |       | 192              |
| Trainees                           | 217   | 174   | 173   | 82    | 178   | 824              |
| Exchange visitors                  | 4,460 | 5,008 | 4,784 | 3,935 | 4,613 | 22,800           |
| Transferees                        |       |       | 9     | 10    | 25    | 44               |
| Total                              | 4,759 | 5,365 | 5,191 | 4,293 | 5,166 | 24,764           |

Original Source: Annual Reports (Immigration and Naturalization Service, U.S. Department of Justice, Washington, D.C., Tables 8A & 16B).

\*Source: Dublin, Thomas. "Foreign Physicians: Their Impact on U.S. Health Care," *Science*. Vol. 185 (August 2, 1974). p. 408.

Table 3

| NUMBER OF FOREIGN-TRAINED PHYSICIANS (M.D.) IN THE UNITED STATES, BY GEOGRAPHIC REGION OF GRADUATION: DECEMBER 31, 1970 * |                     |                      |
|---|---------------------|----------------------|
| Region of graduation  | Number <sup>1</sup> | Percent distribution |
| All regions .....   | 63,400              | 100.0                |
| Africa .....  | 1,130               | 1.8                  |
| Asia .....  | 21,000              | 33.1                 |
| Canada .....  | 6,170               | 9.7                  |
| Europe .....  | 24,760              | 39.1                 |
| Latin America .....   | 9,930               | 15.7                 |
| Oceania .....   | 400                 | 0.6                  |

<sup>1</sup> Includes both active and inactive physicians.

Source: Haug, J. N. and Martin, B. C. *Foreign Medical Graduates in the United States, 1970*. Chicago, American Medical Association, 1971.

NOTE: Figures may not add due to independent rounding.

Source: DHEW: *ibid.*, p. 33 (See Table II).

Table 4

Physicians Admitted to the United States as Immigrants, 1965 and 1972, by Region of Last Permanent Residence\*

| Region of last permanent residence | 1965   |         | 1972   |         |
|------------------------------------|--------|---------|--------|---------|
|                                    | Number | Percent | Number | Percent |
| Europe                             | 568    | 28.2    | 912    | 12.8    |
| North and Central America          | 848    | 42.2    | 696    | 9.7     |
| South America                      | 348    | 17.3    | 263    | 3.7     |
| Asia                               | 205    | 10.2    | 4996   | 69.9    |
| Africa                             | 31     | 1.5     | 222    | 3.1     |
| Other                              | 12     | 0.6     | 55     | 0.8     |
| Total                              | 2012   | 100.0   | 7144   | 100.0   |

Sources: Unpublished tabulations of the National Science Foundation, based on data of the Immigration and Naturalization Service, U.S. Department of Justice.

\*Source: Dublin, *ibid.*, p. 409.

Occupancy of AMA Approved Internships and Residencies  
1950-51 to 1972-73 \*

| Year                                 | Number of positions |                                       |                             | Vacant |
|--------------------------------------|---------------------|---------------------------------------|-----------------------------|--------|
|                                      | Total offered       | Filled by U.S. and Canadian graduates | Filled by foreign graduates |        |
| Internships                          |                     |                                       |                             |        |
| 1950-51                              | 9,370               | 6,308                                 | 722                         | 2,340  |
| 1955-56                              | 11,616              | 7,744                                 | 1,859                       | 2,013  |
| 1960-61                              | 12,547              | 7,362                                 | 1,753                       | 3,432  |
| 1965-66                              | 12,954              | 7,309                                 | 2,361                       | 3,284  |
| 1970-71                              | 15,354              | 8,213                                 | 3,339                       | 3,802  |
| 1972-73                              | 13,650              | 7,239                                 | 3,924                       | 2,487  |
| Residencies                          |                     |                                       |                             |        |
| 1950-51                              | 19,364              | 13,145                                | 1,350                       | 4,869  |
| 1955-56                              | 26,516              | 17,251                                | 4,174                       | 5,091  |
| 1960-61                              | 32,786              | 20,265                                | 8,182                       | 4,339  |
| 1965-66                              | 38,979              | 22,765                                | 9,133                       | 7,074  |
| 1970-71                              | 46,584              | 26,495                                | 12,968                      | 7,121  |
| 1972-73                              | 51,653              | 30,610                                | 14,471                      | 6,577  |
| Internships and residencies combined |                     |                                       |                             |        |
| 1950-51                              | 28,734              | 19,453                                | 2,072                       | 7,209  |
| 1955-56                              | 38,132              | 24,995                                | 6,033                       | 7,104  |
| 1960-61                              | 45,333              | 27,627                                | 9,935                       | 7,771  |
| 1965-66                              | 51,933              | 30,074                                | 11,494                      | 10,358 |
| 1970-71                              | 61,938              | 34,708                                | 16,307                      | 10,923 |
| 1972-73                              | 65,308              | 37,849                                | 18,395                      | 9,064  |

Original Source: "Medical Education in the United States 1972-1973";  
*Journal of the American Medical Association*; 1973; p.939.

\*Source: Dublin, *ibid.*, p. 412.

Table 6

| TREND IN SUPPLY OF TOTAL PHYSICIANS (M.D. AND D.O.) IN UNITED STATES, BY COUNTRY OF GRADUATION: SELECTED YEARS DECEMBER 31, 1959-72 * |                               |                       |                    |                       |                             |
|---|-------------------------------|-----------------------|--------------------|-----------------------|-----------------------------|
| Year  | Total physicians <sup>1</sup> | United States trained | Canadian trained   | Other foreign trained |                             |
|   |                               |                       |                    | Number                | Percent of total physicians |
| 1959  | 255,170                       | 234,595               | 5,421              | 15,154                | 5.9                         |
| 1963  | 289,188                       | 252,619               | 5,644              | 30,925                | 10.7                        |
| 1967  | 322,045                       | 270,179               | 6,050              | 45,816                | 14.2                        |
| 1969  | 338,942                       | N.A.                  | N.A.               | 53,552                | 15.8                        |
| 1970  | 348,328                       | 284,937               | 6,174              | 57,217                | 16.4                        |
| 1971  | 359,373                       | 290,923               | <sup>2</sup> 6,236 | 62,214                | 17.3                        |
| 1972  | N.A.                          | N.A.                  | N.A.               | 68,009                | —                           |

<sup>1</sup> Includes both active and inactive physicians.  
<sup>2</sup> Unpublished data from the American Medical Association.

Source: M.D.'s 1959: Stewart, William H. and Pennell, Maryland Y. *Health Manpower Source Book 11. Medical School Alumni*. U.S. Government Printing Office, 1961.  
M.D.'s 1963, 1967: Theodore, C. N. and Haug, J. N. *Selected Characteristics of the Physician Population, 1963 and 1967*. Chicago, American Medical Association, 1968.  
M.D.'s 1969-72: American Medical Association. *Profile of Medical Practice*. 1973 and prior annual editions. Chicago, The Association, 1973.  
D.O.'s 1959, 1971: Estimated by BHRD, Division of Manpower Intelligence.  
D.O.'s 1963-70: National Center for Health Statistics. *Health Resources Statistics. Health Manpower and Health Facilities, 1971*. DHEW Pub. No. (HSM) 72-1502. U.S. Government Printing Office, 1972.

\*Source: DHEW: *ibid.*, p. 33.



Table 7

| SUPPLY OF ACTIVE FOREIGN TRAINED PHYSICIANS, USING BASIC METHODOLOGY AND ALTERNATIVE ASSUMPTIONS:<br>ACTUAL 1970; PROJECTED 1975-90 * |        |        |         |         |         |
|---|--------|--------|---------|---------|---------|
| Projection series   | 1970   | 1975   | 1980    | 1985    | 1990    |
| Number of active foreign trained physicians <sup>1</sup>  |        |        |         |         |         |
| Basic methodology .....   | 60,000 | 86,000 | 112,000 | 138,000 | 164,000 |
| Alternatives:   |        |        |         |         |         |
| Low .....   | 60,000 | 80,000 | 99,000  | 118,000 | 137,000 |
| High .....  | 60,000 | 92,000 | 125,000 | 158,000 | 191,000 |
| Rate per 100,000 population <sup>2</sup>  |        |        |         |         |         |
| Basic methodology .....   | 29.4   | 40.0   | 49.3    | 57.7    | 65.4    |
| Alternatives:   |        |        |         |         |         |
| Low .....   | 29.4   | 37.4   | 43.8    | 49.5    | 54.8    |
| High .....  | 29.4   | 42.6   | 54.9    | 65.8    | 76.0    |

<sup>1</sup> Includes Canadian trained physicians.  
<sup>2</sup> Resident population as of July 1 for 50 States and the District of Columbia.  
 DHEW Health Manpower Projections 1970-1990  
 Source: 1970 foreign trained physicians: Haug, J.N. and Martin, R. C. *Foreign Medical Graduates in the United States, 1970*. Chicago, American Medical Association, 1971.  
 Population: U.S. Bureau of the Census. *Current Population Reports*. Series P-25, Nos. 468, 477, and 483.

Basic projection: based on assumption that the active 1970 base of FMG's would experience a net yearly increase of 5,200 through 1990 (including Canadians).

High projection: based on assumption that the active FMG base (including Canadians) of 59,966 in 1970 would increase by 5,200 in 1971 (as it actually did) but would then rise subsequently by an arbitrarily chosen increment of 6,600 a year through 1990.

Low projection: based on assumption that the supply of foreign trained physicians would increase by the same average yearly net increment observed in 1963-1970. The active FMG's (including Canadians) in 1970 would therefore increase by the already achieved 5,200 increment of 1971 but thereafter would increase by only 3,800 a year through 1990.

\*Source: DHEW: *ibid.*, p. 53.

Table 8

NUMBER OF ACTIVE PHYSICIANS (M.D.), BY MAJOR PROFESSIONAL ACTIVITY AND COUNTRY OF GRADUATION:  
DECEMBER 31, 1970 \*

| Major professional activity | Number of active physicians by country of graduation |         |        | Percent distribution |         |        |
|-----------------------------|--|---------|--------|----------------------|---------|--------|
|                             | United States  | Foreign | Canada | United States        | Foreign | Canada |
| All activities .....        | 251,240  | 54,420  | 5,550  | 100.0                | 100.0   | 100.0  |
| Patient care .....          | 225,620  | 48,190  | 4,720  | 89.8                 | 88.6    | 85.0   |
| Office based .....          | 167,950  | 20,980  | 3,510  | 66.8                 | 38.6    | 63.2   |
| Hospital based .....        | 57,670   | 27,210  | 1,210  | 23.0                 | 50.0    | 21.8   |
| Interns, residents .....    | 33,970   | 16,650  | 610    | 13.5                 | 30.6    | 11.0   |
| Full-time staff .....       | 23,700   | 10,560  | 600    | 9.4                  | 19.4    | 10.8   |
| Medical teaching .....      | 4,450  | 1,010   | 140    | 1.8                  | 1.9     | 2.5    |
| Administration .....        | 10,670   | 1,190   | 300    | 4.2                  | 2.2     | 5.4    |
| Research .....              | 8,320  | 3,290   | 320    | 3.3                  | 6.0     | 5.8    |
| Other .....                 | 2,110  | 470     | 60     | 0.8                  | 0.9     | 1.1    |
| Not classified .....        | 70   | 280     | 10     | (1)                  | 0.5     | 0.2    |

<sup>1</sup> Less than 0.05 percent.

Source: Haug, J. N. and Martin, B. C. *Foreign Medical Graduates in the United States, 1970*. Chicago, American Medical Association, 1971.

Note: Figures may not add to totals and subtotals due to independent rounding.

\*Source: DHEW, *ibid.*, p. 36.

Table 9

PERCENT DISTRIBUTION OF ACTIVE PHYSICIANS (M.D.) AND OF FIRST-YEAR RESIDENTS, BY SPECIALTY AND COUNTRY OF GRADUATION FROM MEDICAL SCHOOL: 1970\*

| Specialty                            | Active physicians (M.D.) (December 31) |                        |                            |                                 | First-year residents (September 1) |                                     |                                 |
|--------------------------------------|--|------------------------|----------------------------|---------------------------------|------------------------------------|-------------------------------------|---------------------------------|
|                                      | Total                                  | U.S. medical graduates | Canadian medical graduates | Other foreign medical graduates | Total                              | U.S. and Canadian medical graduates | Other foreign medical graduates |
| All active M.D.'s:                   |  |                        |                            |                                 |                                    |                                     |                                 |
| Number                               | 311,203                                | 251,237                | 5,548                      | 54,418                          | 14,556                             | 10,199                              | 4,357                           |
| Percent                              | 100.0                                  | 100.0                  | 100.0                      | 100.0                           | 100.0                              | 100.0                               | 100.0                           |
| General practice <sup>1</sup>        | 18.6                                   | 20.1                   | 13.9                       | 12.4                            | 1.9                                | 0.5                                 | 2.1                             |
| Medical specialties                  | 20.8                                   | 21.2                   | 15.6                       | 19.4                            | 31.1                               | 31.2                                | 28.6                            |
| Dermatology                          | 1.3                                    | 1.4                    | 1.5                        | 0.7                             | 1.4                                | 1.9                                 | 0.3                             |
| Internal medicine                    | 13.5                                   | 13.9                   | 9.4                        | 11.7                            | 20.9                               | 21.6                                | 19.3                            |
| Pediatrics <sup>2</sup>              | 6.1                                    | 5.9                    | 4.7                        | 7.0                             | 8.1                                | 7.8                                 | 11.2                            |
| Surgical specialties                 | 27.5                                   | 28.1                   | 28.6                       | 22.9                            | 36.3                               | 38.1                                | 32.5                            |
| General surgery                      | 9.6                                    | 9.6                    | 8.3                        | 9.7                             | 17.3                               | 16.5                                | 19.1                            |
| Neurological surgery                 | 0.8                                    | 0.8                    | 1.4                        | 0.8                             | 1.0                                | 1.0                                 | 0.8                             |
| Obstetrics and gynecology            | 6.1                                    | 6.1                    | 6.1                        | 5.6                             | 5.9                                | 5.3                                 | 7.2                             |
| Ophthalmology                        | 3.2                                    | 3.5                    | 3.8                        | 1.5                             | 3.2                                | 4.3                                 | 0.6                             |
| Orthopedic surgery                   | 3.1                                    | 3.4                    | 3.7                        | 1.6                             | 3.6                                | 4.7                                 | 1.2                             |
| Otolaryngology                       | 1.7                                    | 1.6                    | 2.3                        | 1.2                             | 1.6                                | 2.0                                 | 0.6                             |
| Plastic surgery                      | 0.5                                    | 0.5                    | 0.6                        | 0.4                             | 0.8                                | 0.9                                 | 0.6                             |
| Thoracic surgery                     | 0.6                                    | 0.6                    | 0.5                        | 0.7                             | 0.9                                | 1.0                                 | 1.0                             |
| Urology                              | 1.9                                    | 2.0                    | 1.9                        | 1.4                             | 2.1                                | 2.3                                 | 1.8                             |
| Other specialties                    | 33.3                                   | 30.6                   | 41.9                       | 45.4                            | 30.6                               | 29.2                                | 36.0                            |
| Anesthesiology                       | 3.5                                    | 2.9                    | 4.7                        | 6.1                             | 4.7                                | 3.3                                 | 8.0                             |
| Child psychiatry                     | 0.7                                    | 0.6                    | 1.4                        | 0.8                             | 1.2                                | 1.3                                 | 1.0                             |
| Neurology                            | 1.0                                    | 0.9                    | 1.6                        | 1.2                             | 1.9                                | 2.1                                 | 1.7                             |
| Psychiatry                           | 6.8                                    | 6.2                    | 10.2                       | 9.2                             | 9.5                                | 10.3                                | 7.7                             |
| Pathology                            | 3.4                                    | 2.7                    | 4.5                        | 5.8                             | 5.1                                | 3.2                                 | 9.6                             |
| Physical medicine and rehabilitation | 0.5                                    | 0.4                    | 0.5                        | 0.9                             | 0.7                                | 0.3                                 | 1.5                             |
| Radiology                            | 3.4                                    | 3.6                    | 3.2                        | 2.6                             | 6.2                                | 7.3                                 | 3.8                             |
| Therapeutic radiology                | 0.3                                    | 0.3                    | 0.3                        | 0.4                             | 0.2                                | 0.3                                 | 0.2                             |
| Miscellaneous                        | 13.7                                   | 13.0                   | 15.5                       | 18.3                            | 0.9                                | 1.1                                 | 0.5                             |

<sup>1</sup> Includes family practice.

<sup>2</sup> Includes pediatric allergy and pediatric cardiology.

Source: Active physicians: Haug, J. N. and Martin, B. C. *Foreign Medical Graduates in the United States, 1970*. Chicago, American Medical Association, 1971.

First-year residents: American Medical Association. *Director of Approved Internships and Residencies, 1971-72*. Chicago, The Association, 1971.

\*Source: DHEW, *ibid.*, p. 58.



Table 10

NUMBER OF PHYSICIANS (M.D.), BY LOCATION AND COUNTRY OF GRADUATION: DECEMBER 31, 1970 \*

| Region, division, and State | Number <sup>1</sup> by country of graduation |         |        | Percent by country of graduation |         |        | Percent distribution |         |        |
|-----------------------------|--|---------|--------|----------------------------------|---------|--------|----------------------|---------|--------|
|                             | United States                                | Foreign | Canada | United States                    | Foreign | Canada | United States        | Foreign | Canada |
| All locations .....         | 270,600                                      | 57,200  | 6,200  | 81.0                             | 17.1    | 1.9    | 100.0                | 100.0   | 100.0  |
| United States .....         | 264,240                                      | 54,620  | 5,980  | 81.3                             | 16.8    | 1.8    | 97.6                 | 95.5    | 96.5   |
| NORTHEAST .....             | 69,580                                       | 26,030  | 2,260  | 71.1                             | 26.6    | 2.3    | 25.7                 | 45.5    | 36.9   |
| New England .....           | 18,440                                       | 4,150   | 840    | 78.7                             | 17.7    | 3.6    | 6.8                  | 7.3     | 13.9   |
| Connecticut .....           | 4,620  | 1,270   | 190    | 76.0                             | 20.9    | 3.1    | 1.7                  | 2.2     | 3.1    |
| Maine .....                 | 900  | 170     | 110    | 76.1                             | 14.7    | 9.2    | 0.3                  | 0.3     | 1.8    |
| Massachusetts .....         | 10,230                                       | 2,000   | 350    | 81.3                             | 15.9    | 2.8    | 3.8                  | 3.5     | 5.7    |
| New Hampshire .....         | 860  | 150     | 100    | 78.1                             | 13.2    | 8.7    | 0.3                  | 0.3     | 1.6    |
| Rhode Island .....          | 1,080  | 500     | 60     | 66.2                             | 30.2    | 3.6    | 0.4                  | 0.9     | 1.0    |
| Vermont .....               | 760  | 70      | 40     | 87.1                             | 6.2     | 4.7    | 0.3                  | 0.1     | 0.7    |
| Middle Atlantic .....       | 51,140                                       | 21,880  | 1,420  | 68.7                             | 29.4    | 1.9    | 18.9                 | 38.2    | 23.0   |
| New Jersey .....            | 7,570  | 3,220   | 130    | 69.3                             | 29.5    | 1.2    | 2.8                  | 5.6     | 2.2    |
| New York .....              | 27,800                                       | 15,950  | 1,060  | 62.0                             | 35.6    | 2.4    | 10.3                 | 27.9    | 17.2   |
| Pennsylvania .....          | 15,780                                       | 2,710   | 220    | 84.3                             | 14.5    | 1.2    | 5.8                  | 4.7     | 3.6    |
| SOUTH .....                 | 76,440                                       | 10,010  | 770    | 87.6                             | 1.5     | 0.9    | 28.2                 | 17.6    | 12.6   |
| South Atlantic .....        | 40,850                                       | 7,220   | 550    | 84.0                             | 14.9    | 1.1    | 15.1                 | 12.7    | 8.9    |
| Delaware .....              | 540  | 220     | 20     | 69.3                             | 27.7    | 2.9    | 0.2                  | 0.4     | 0.4    |
| District of Columbia .....  | 3,250  | 780     | 40     | 79.9                             | 19.1    | 1.0    | 1.2                  | 1.4     | 0.7    |
| Florida .....               | 9,510  | 1,770   | 170    | 83.1                             | 15.4    | 1.5    | 3.5                  | 3.1     | 2.7    |
| Georgia .....               | 5,090  | 430     | 20     | 91.7                             | 7.8     | 0.4    | 1.9                  | 0.8     | 0.4    |
| Maryland .....              | 7,140  | 2,250   | 130    | 75.0                             | 23.6    | 1.4    | 2.6                  | 3.9     | 2.1    |
| North Carolina .....        | 5,700  | 310     | 60     | 93.9                             | 5.1     | 1.0    | 2.1                  | 0.5     | 1.0    |
| South Carolina .....        | 2,560  | 100     | 10     | 95.9                             | 3.7     | 0.4    | 1.0                  | 0.2     | 0.2    |
| Virginia .....              | 5,590  | 900     | 70     | 85.4                             | 13.7    | 1.0    | 2.1                  | 1.6     | 1.1    |
| West Virginia .....         | 1,470  | 460     | 20     | 75.3                             | 23.8    | 0.9    | 0.5                  | 0.8     | 0.3    |
| East South Central .....    | 13,110                                       | 870     | 60     | 93.4                             | 6.2     | 0.4    | 4.8                  | 1.5     | 1.1    |
| Alabama .....               | 3,220  | 150     | 10     | 95.3                             | 4.4     | 0.3    | 1.2                  | 0.3     | 0.2    |
| Kentucky .....              | 3,190  | 350     | 20     | 89.7                             | 9.7     | 0.6    | 1.2                  | 0.6     | 0.4    |
| Mississippi .....           | 2,000  | 70      | 10     | 96.3                             | 3.2     | 0.4    | 0.7                  | 0.1     | 0.2    |
| Tennessee .....             | 4,700  | 310     | 20     | 93.5                             | 6.1     | 0.4    | 1.7                  | 0.5     | 0.3    |
| West South Central .....    | 22,480                                       | 1,930   | 160    | 91.5                             | 7.9     | 0.7    | 8.3                  | 3.4     | 2.6    |
| Arkansas .....              | 1,920  | 30      | 10     | 98.4                             | 1.3     | 0.3    | 0.7                  | (2)     | 0.1    |
| Louisiana .....             | 4,480  | 260     | 30     | 93.9                             | 5.5     | 0.7    | 1.7                  | 0.5     | 0.5    |
| Oklahoma .....              | 2,780  | 110     | 20     | 95.7                             | 3.6     | 0.7    | 1.0                  | 0.2     | 0.3    |
| Texas .....                 | 13,310                                       | 1,540   | 110    | 89.0                             | 10.3    | 0.7    | 4.9                  | 2.7     | 1.7    |
| NORTH CENTRAL .....         | 59,750                                       | 14,030  | 1,280  | 79.6                             | 18.7    | 1.7    | 22.3                 | 24.5    | 21.0   |
| East North Central .....    | 41,010                                       | 11,350  | 930    | 76.7                             | 21.6    | 1.7    | 15.2                 | 20.2    | 15.1   |
| Illinois .....              | 11,610                                       | 4,540   | 170    | 71.1                             | 27.8    | 1.1    | 4.3                  | 7.9     | 2.8    |
| Indiana .....               | 4,950  | 470     | 40     | 90.6                             | 8.6     | 0.8    | 1.8                  | 0.8     | 0.7    |
| Michigan .....              | 8,560  | 2,380   | 430    | 75.3                             | 20.9    | 3.8    | 3.2                  | 4.2     | 7.0    |
| Ohio .....                  | 11,000                                       | 3,520   | 230    | 74.6                             | 23.9    | 1.5    | 4.1                  | 6.2     | 3.7    |
| Wisconsin .....             | 4,890  | 640     | 50     | 87.6                             | 11.5    | 0.9    | 1.8                  | 1.1     | 0.9    |

see next page

Table 10 (continued)

| NUMBER OF PHYSICIANS (M.D.), BY LOCATION AND COUNTRY OF GRADUATION: DECEMBER 31, 1970—Continued |  |         |        |                                  |         |        |                      |         |        |
|---|--|---------|--------|----------------------------------|---------|--------|----------------------|---------|--------|
| Region, division, and State   | Number <sup>1</sup> by country of graduation |         |        | Percent by country of graduation |         |        | Percent distribution |         |        |
|   | United States                                | Foreign | Canada | United States                    | Foreign | Canada | United States        | Foreign | Canada |
| <b>NORTH CENTRAL—Continued</b>  |  |         |        |                                  |         |        |                      |         |        |
| West North Central .....  | 18,740                                       | 2,480   | 360    | 86.9                             | 11.5    | 1.7    | 7.1                  | 4.3     | 5.9    |
| Iowa .....  | 2,710  | 320     | 30     | 88.5                             | 10.6    | 1.0    | 1.0                  | 0.6     | 0.5    |
| Kansas .....  | 2,580  | 300     | 30     | 88.7                             | 10.3    | 1.0    | 1.0                  | 0.5     | 0.5    |
| Minnesota .....   | 5,300  | 650     | 200    | 86.3                             | 10.5    | 3.2    | 2.0                  | 1.1     | 3.2    |
| Missouri .....  | 5,280  | 980     | 50     | 83.7                             | 15.6    | 0.8    | 2.0                  | 1.7     | 0.8    |
| Nebraska .....  | 1,780  | 70      | 10     | 95.8                             | 3.8     | 0.4    | 0.7                  | 0.1     | 0.1    |
| North Dakota .....  | 530  | 90      | 40     | 80.0                             | 13.8    | 6.2    | 0.2                  | 0.2     | 0.7    |
| South Dakota .....  | 560  | 70      | 0      | 88.4                             | 11.1    | 0.5    | 0.2                  | 0.1     | 0.1    |
| <b>WEST</b>   |  |         |        |                                  |         |        |                      |         |        |
| Mountain .....  | 58,480                                       | 4,550   | 1,670  | 90.4                             | 7.0     | 2.6    | 21.8                 | 8.1     | 27.0   |
| Arizona .....   | 11,780                                       | 780     | 190    | 92.4                             | 6.1     | 1.5    | 4.5                  | 1.4     | 3.1    |
| Colorado .....  | 2,610  | 280     | 50     | 88.8                             | 9.6     | 1.6    | 1.0                  | 0.5     | 0.8    |
| Idaho .....   | 4,080  | 260     | 50     | 92.9                             | 5.9     | 1.2    | 1.5                  | 0.5     | 0.8    |
| Montana .....   | 700  | 10      | 10     | 97.1                             | 1.5     | 1.4    | 0.3                  | (2)     | 0.2    |
| Nevada .....  | 740  | 30      | 10     | 94.4                             | 3.8     | 1.8    | 0.3                  | 0.1     | 0.2    |
| New Mexico .....  | 560  | 10      | 20     | 93.6                             | 2.4     | 4.0    | 0.2                  | (2)     | 0.4    |
| Utah .....  | 1,240  | 130     | 20     | 89.4                             | 9.1     | 1.5    | 0.5                  | 0.2     | 0.3    |
| Wyoming .....   | 1,510  | 40      | 20     | 96.1                             | 2.7     | 1.1    | 0.6                  | 0.1     | 0.3    |
| Pacific .....   | 350  | 10      | 10     | 95.1                             | 3.6     | 1.4    | 0.1                  | (2)     | 0.1    |
| Alaska .....  | 46,700                                       | 3,770   | 1,470  | 90.0                             | 7.3     | 2.8    | 17.3                 | 6.7     | 23.9   |
| California .....  | 300  | 20      | 0      | 93.5                             | 5.2     | 1.2    | 0.1                  | (2)     | 0.1    |
| Hawaii .....  | 37,480                                       | 2,980   | 1,180  | 90.0                             | 7.2     | 2.8    | 13.9                 | 5.2     | 19.2   |
| Oregon .....  | 1,000  | 200     | 30     | 80.9                             | 16.4    | 2.7    | 0.4                  | 0.4     | 0.5    |
| Washington .....  | 2,980  | 140     | 60     | 93.7                             | 4.4     | 1.9    | 1.1                  | 0.3     | 1.0    |
| Possessions .....   | 4,940  | 430     | 190    | 88.8                             | 7.7     | 3.5    | 1.8                  | 0.8     | 3.1    |
| Other <sup>3</sup> .....  | 1,410  | 1,410   | 10     | 49.8                             | 49.9    | 0.4    | 0.5                  | 2.5     | 0.2    |
|   | 4,980  | 1,180   | 190    | 78.4                             | 18.6    | 3.0    | 1.8                  | 2.1     | 3.1    |

<sup>1</sup> Includes both active and inactive physicians.  
<sup>2</sup> Includes physicians with APO-FPO addresses and with address unknown.  
<sup>3</sup> Less than 0.05 percent.

Source: Haug, J. N. and Martin, B. C. *Foreign Medical Graduates in the United States, 1970*. Chicago, American Medical Association, 1971.

Note: Figures may not add to totals and subtotals due to independent rounding.

\*Source: DHEW *ibid.* p. 37-38

Table 11

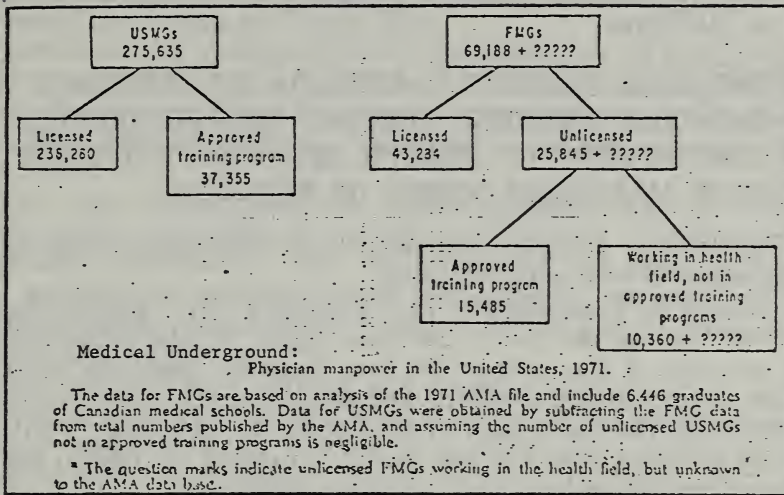
| Foreign medical graduates in metropolitan and nonmetropolitan areas of the United States, by region of origin, 1970 * |                     |        |    |          |    |         |   |
|---|---------------------|--------|----|----------|----|---------|---|
| Region of Origin  | Total               | SMSA   |    | Non-SMSA |    | Unknown |   |
|   |                     | no.    | %  | no.      | %  | no.     | % |
| All regions   | 57,217 <sup>a</sup> | 51,053 | 89 | 5,186    | 9  | 978     | 2 |
| Europe  | 24,756              | 21,898 | 88 | 2,555    | 10 | 303     | 1 |
| Americas  | 9,927               | 8,192  | 83 | 1,312    | 13 | 423     | 4 |
| Asia, total   | 20,829              | 19,368 | 93 | 1,235    | 6  | 226     | 1 |
| India and Pakistan  | 4,741               | 4,543  | 96 | 157      | 3  | 41      | 1 |
| All other   | 16,088              | 14,825 | 92 | 1,078    | 7  | 185     | 1 |
| Africa  | 1,301               | 1,216  | 93 | 68       | 5  | 17      | 1 |
| Oceania   | 404                 | 379    | 94 | 16       | 4  | 9       | 2 |

a) excluding Canadians

Source: Haug, J. N., and Martin, B. C.; *Foreign Medical Graduates in the United States, 1970*; AMA, Chicago; 1971.

\*Source: Williams and Locke p. 230.

Table 12



Source: Same as Table 13.

Kleinman, Joel, Weiss, Robert, Felsenthal, Dan. "Physician Manpower Data: The Case of the Missing Foreign Medical Graduates," Medical Care Vol. 12, No. 11 (November, 1974), p. 909.

Table 13

| Estimated Number of Immigrant Physicians Unknown to AMA by Year of Admission to U.S. |   |   |                            |
|--|---|---|----------------------------|
| Year Admitted  | Estimated Number Unknown<br>( $\pm$ Standard Error) | Estimated Per Cent Unknown<br>( $\pm$ Standard Error) | Total Immigrant Physicians |
| 1961-1965  | 2,125 ( $\pm$ 437)                                  | 23.7 ( $\pm$ 4.9)                                     | 8,964                      |
| 1966-1968  | 3,389 ( $\pm$ 441)                                  | 38.2 ( $\pm$ 5.0)                                     | 8,858                      |
| 1969-1971  | 3,608 ( $\pm$ 515)                                  | 36.5 ( $\pm$ 5.2)                                     | 9,888                      |
| All years  | 9,121 ( $\pm$ 806)                                  | 32.9 ( $\pm$ 2.9)                                     | 27,710                     |

Kleinman, P. 914.



Senator KENNEDY. Our next witness is Dr. Robert E. Tranquada, associate dean and regional director, central health services region, department of health services, University of Southern California School of Medicine.

**STATEMENT OF DR. ROBERT E. TRANQUADA, M.D., ASSOCIATE DEAN AND REGIONAL DIRECTOR, CENTRAL HEALTH SERVICES REGION, DEPARTMENT OF HEALTH SERVICES, UNIVERSITY OF SOUTHERN CALIFORNIA SCHOOL OF MEDICINE**

Dr. TRANQUADA. I appreciate very much this opportunity to provide testimony to your subcommittee.

I am Robert E. Tranquada of Los Angeles, Calif. I am the regional director of the central health services region of the department of health services of the county of Los Angeles, associate dean and professor of community medicine and public health at the University of Southern California School of Medicine. The testimony I will provide is my own and does not necessarily represent the official position of either of the institutions by which I am employed.

It is certainly no revelation to state that the solutions to the problems faced by the currently considered health manpower legislation are exceedingly complex. And yet the recognition of that very complexity is essential to the selection of workable legislation. There exists a rather clear consensus as to the desired general results of such legislation, yet the pathway to such results is anything but universally recognizable. Simple and direct solutions simply do not exist and the hazards associated with the adoption of very specific remedies for complex and incompletely defined problems are real and not to be ignored.

Most important to the solution of this set of problems is the determination that the result of any legislative action be central to the solution of the problem. Fixing the fuel line will not resolve the problem if the carburetor is faulty or the gas tank is empty.

For example, the causes of the existing geographical maldistribution of medical manpower are multifactorial and include not only the role of the medical school, but also potential social, cultural, and economic factors not controlled by medical schools. Physicians' wives who refuse to live in the country, concerns about personal security in some urban settings, social standing derived from practice location, availability of complex technical support and a variety of other factors act to influence the free distribution of physicians. The fact is that the solutions to the problems of adequate physician supply in the urban underserved and rural areas will be costly and, if the experience of other nations is to be considered, probably never totally satisfactory. No solution will be successful without a national commitment to the inevitable cost increment which will be a permanent requirement not resolved by temporary, time-limited programs. Nor will identification of the medical school as the only part of the system to be dealt with result in anything but frustration.

Therefore, measures applied to medical schools must be part of a more comprehensive approach to the problem. Such an approach must recognize the costs of establishing and maintaining effective medical practices in undesirable locations, the inevitable cost inequi-

ties to be dealt with by health insurance mechanisms, and the need for the development of less expensive systems of use of health manpower, distribution of resources and transportation which may provide other avenues to the solution of this problem.

By contrast, the problem of the maldistribution of specialist training is much closer to control through actions relating to medical schools. Based upon those introductory considerations, my comments to the committee regarding the subject of health manpower legislation follow.

Of the four major problems being considered by the committee, I shall restrict my testimony to the consideration of maldistribution of physicians particularly with regard to rural and urban underserved areas, and to the maldistribution of specialty residency programs and the resulting oversupply of some specialties and undersupply of primary care specialists.

I have long felt that the best and most rational program of financing medical education leading to a solution of the physician maldistribution problem would be that of a direct and significant level of Federal support to medical schools linked with free tuition for all medical students. All medical school graduates would then derive an obligation for a period, perhaps 2 years, of national service which was mandatory and which could not be redeemed with cash. Such service could be in any area of national interest, including practice in underserved areas, urban or rural, military service, public health service, or other service deemed to be of national priority. The adaptation to such a system would be strenuous, indeed. I do not believe that the complexities involved could be mastered constructively if taken in a single step. Nevertheless, as a potentially equitable method of financing medical education and deriving needed service to the Nation, it is a method which deserves consideration as a secondary goal.

The expansion of scholarship or grant aid tied to a period of mandatory public service will unquestionably increase manpower availability to urban and rural underserved areas. If linked to the National Health Service Corps concept which seeks to improve the conditions and opportunities for such medical practice as well. How much should this program be emphasized, how administered, and how does it relate to other forms of support to medical schools?

Because the potential effects of such a program are both widespread and not entirely predictable, some caution should be exercised in establishing its initial dimensions. Initially, I would favor a combination of voluntary and mandatory measures with frequent reassessment and readjustment as detailed effects become clearly identifiable. For example, if funds were made available to finance 50 percent of entering medical school students and medical schools were required initially to reserve a minimum of 15 or 20 percent of entering places for such committed students, with a voluntary mechanism left for the remainder, such a set of conditions could be provided. Some time should be allowed for assessment before significant changes were made. Any subsequent corrective action would be much better based upon such realistic experience.

It is predictable that such a program will relate in a complex manner to the tuition differential between State-supported and private schools, the varying perceptions of such opportunities by the applicant pool—whose size may be affected significantly by such a pro-



gram—and the success of the NHSC program itself. Rather than a commitment to a very major change with unknown and unpredictable results, a stepwise approach with frequent reevaluation, I feel, would be best. Real, rather than speculative, results could then be dealt with.

Such a program will have significant effects on a variety of legitimate interests in health care. Thus it would be advisable to devise a mechanism such as an advisory council to the Secretary of HEW, broadly representative of all affected parties—medical schools, local and State government, urban and rural consumers, appropriate professional organizations and the Federal Government to assess progress and problems in the development and administration of such a program.

The health systems agencies to be established under Public Law 93-641 might well have a role in the evaluation of such a program. However, that role should be dependent upon devising a more reliable mechanism than now seems available for the direct accountability of the HSA governing board to the communities which such HSA's serve.

With regard to the need to further increase the production of physicians in U.S. medical schools, I am convinced that the projected output which will result from presently effective programs will be sufficient. A ratio of physicians greater than 200:100,000 is very unlikely to improve individual health, is quite likely to prove an exceedingly expensive method of providing medical care and certainly cannot be shown to be a national priority of any significance at this time.

The problem of maldistribution of medical specialists within medicine is similarly complex. Here, however, the medical schools have a much more central role to play. The major problem is that precise methods for the allocation of medical specialty training positions do not exist, nor have all of the side effects of significant changes in the number of existing trainees been assessed. Such uncertainties mandate a cautious approach to the problem as they represent sources of potentially very serious and tangible side effects of such a program. At the same time, the problem must be solved as rapidly as possible and legislative mandates to such early solutions should be sought.

Since national requirements for the specialties are not known with any precision and mandated changes may be expected to result in major adjustments in teaching hospitals, time for adjustments must be allowed and initial phasing must be modest. Because considerable inertia and multiple vested interests are involved, totally voluntary cooperation would not be expected to achieve significant progress.

Methods must be identified to compensate for dislocations which may occur that would be counter to the objective of improved distribution of physicians geographically. For example, reduction in the size of training programs in inner city public hospitals may seriously affect the availability of secondary and tertiary level care to underserved populations. Such effects could be countered by assignment of trained NHSC obligatees to such situations, or by compensation of local governments adequate to allow for manpower replacement. The problem is not simple. The availability of interns and residents to public hospitals, combined with existing attitudes toward the funding priorities of public health services and hard-pressed property-tax based budget has decreed a lower level of staffing in nursing and ancillary services. The slack of such understaffing is taken up by the trainees



who customarily provide significant amounts of clerical, nursing and ancillary services which would be wasteful if provided by more highly paid, fully trained physicians. Furthermore, physicians in training are traditionally expected to put in longer hours without premium time compensation than could be reasonably expected from full time, graduate medical staff. These requirements must be assessed carefully before such a program is instituted.

On the other hand, successful training programs require significant concentrations of properly skilled and motivated instructors and consultants. The mere possession of a professional degree does not insure either the skill or motivation to teach. Successful training and educational programs cannot be carried out in any random location just to fulfill a service need. The notion of initiating significant training programs in remote and rural areas on any significant scale may prove to be self-defeating and excessively expensive.

Since the location where residency training is obtained is much more closely related to eventual choice of practice site, local and regional planning concerns become much more relevant than those surrounding the location of medical schools. For this reason, the functional design closely related to eventual choice of practice site, local and regional interest to be represented. The resulting maldistribution of specialized physicians, should this factor be ignored, could well prove as vexing as the current problems.

A suitable solution to this problem would necessarily involve an initial national planning process derived from nationally established standards applied by regional planning groups representative of each of the significant interests—consumers, medical schools, practitioners, hospitals, and local and State government. HSA's given adequate local accountability, or coalitions of HSA's could well serve such a purpose. It would be well to mandate reasonable timetables for progress to insure that action as well as planning takes place. Additional planning to resolve problems of dislocation of essential physician manpower which may result from such a program would be necessary, along with guarantees of funds and mechanisms for remedial action.

Two additional concerns must be expressed. The progress in biomedical knowledge and its benefits which have been derived from the existing medical educational establishment are undeniable. There is general agreement that such a collection of resources is truly a national resource which we cannot afford to put in jeopardy. The notion that all discretionary funds should be tied to mandatory conformance with manpower concerns would inevitably be detrimental, if not destructive, to such a resource. Totally centralized planning would inevitably tend to be detrimental to the quality that our schools of medicine have developed. Some mechanisms for maintaining this resource must be identified. Perhaps the best method would be the maintenance of a minimal capitation mechanism of the order of \$1,500 per year which is discretionary and not dependent upon compliance with manpower needs. Additional capitation would then be dependent upon compliance with other national interests. There is clearly an element of expense in the maintenance of schools which is in the broadest national interest and should not be charged to the cost of education borne by individual students. While there may be no disagreement as to the value of that interest, there can be no disagreement that it exists and is vital.

An inevitable result of a significant decrease in discretionary capitation funds will be an increase in tuition. Whether State-funded medical schools will do so is unknown. The end result could be a further increase in the existing tuition cost differential between private and State medical schools. The effects of such an increased differential could range from a significant decrease in the applicant pool able to bear such costs, especially among minority groups, to the need for private medical schools to depend increasingly upon NHSC scholarships while State schools could anticipate a lower need because of substantially lower student costs.

The problem of allocation of NHSC scholarships to State-operated schools who restrict admission to residents of the State must also be faced.

In a similar vein, it is essential that our existing schizophrenia with regard to the financing of postgraduate—intern and resident—training programs be resolved. The present tendencies of all sources of medical care financing, both private and public, to deny responsibility for the expenses of manpower training must be resolved with a coherent and adequate national policy. One result of the allocation method of controlling the output of medical specialists could be the recognition by private and public medical care financing sources of approved training programs as legitimate additional costs of providing medical care in those institutions and all arguments ended on the matter.

Since these are national priorities and necessary allocation of approved training programs may result in inequitable burdens upon local or private medical care funding resources, this is logically a Federal responsibility. Certainly there is no rational relationship between the funding of medical resident training and local property taxes or State sales taxes. Such a resolution would provide substantial relief to medical educators, hospital administrators, insurance administrators and local communities alike, who have resorted to many inequitable devices to deal with the multiple frustrations and inconsistencies surrounding the financing of medical manpower training costs. The groundwork for such a solution should be made part of any health manpower training legislation dealing with resident training allocation.

Thank you.

Senator KENNEDY. How are they doing it now out in Los Angeles County?

Dr. TRANQUADA. Some of the training is being supported by research funds, but a great deal of it is actually supported by the county property taxpayer. I think with the current squeeze on local financing resources, this is currently being reevaluated, and it seems unlikely that Los Angeles County, for one, will be able to continue to support training at the level that it has been.

Senator KENNEDY. Are they using NIH research funds for the training?

Dr. TRANQUADA. To the extent that they are applicable to fellowship programs, yes. I am sorry, I do not mean to say research funds, I mean training funds as opposed to research funds.

Senator KENNEDY. OK, I appreciate your very helpful and thoughtful testimony. We would like to stay in touch with you.

I want to thank you very, very much.

Dr. TRANQUADA. Thank you.



Senator KENNEDY. Our next witness is Dr. Arden Miller, former dean of the University of Kansas Medical School and now professor of the School of Public Health at the University of North Carolina, School of Medicine, Chapel Hill; also currently president of the American Public Health Association.

There is a distinguished graduate from Kansas medical school right here on the staff. He is very helpful to us.

**STATEMENT OF DR. C. ARDEN MILLER, M.D., PROFESSOR, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE, PRESIDENT, AMERICAN PUBLIC HEALTH ASSOCIATION**

Dr. MILLER. We are exceedingly proud of him, sir.

On behalf of the American Public Health Association, but also with my interest and background in medical education, I have five points I would like to make. Three of them I will make very briefly because I think they have been made quite adequately by others. I have prepared a written statement which I would like to be made a part of the record.

One: We thoroughly support efforts to achieve a redistribution of physicians and thoroughly support doing this by means of scholarships in exchange for obligatory service on behalf of underserved populations.

Second: We thoroughly support efforts to put limitations on numbers of residency training programs and achieve some redistribution of specialties within those residency programs.

Senator KENNEDY. How are we going to do that?

Dr. MILLER. We believe this belongs in the public domain and not in the professional. We should bear in mind the traditional inability of professional societies adequately to monitor and regulate their own programs.

Third: We approve institutional support to schools of health professional education; capitation arrangements seem to us the most reasonable method. It also seems reasonable that in exchange for that funding there be some kind of institutional commitment in support of policies that improve primary and comprehensive community care.

The fourth point that I think has not been touched on, to the extent that it might be, has to do with public health education. I am not impressed that much can be achieved on behalf of underserved populations by dropping physicians down in their midst. Physicians are effective almost in direct relation to the strength of supporting services they have about them. I think it is terribly important that good local health departments, good hospitals, good planning agencies, and all kinds of supportive services be made available.

We move as a nation toward a time when we expect to have national health insurance, functional PSRO's, obligatory service on behalf of underserved populations, local planning groups, and so on. I think we desperately need the skills that are not unique too but are certainly characteristic of the kind of students turned out by schools of public health. I would not regard a health manpower bill adequate unless it gave support to schools of public health. That support ought not only to be institutional support, but project support for the graduate programs and support for students. We face a rather interesting



paradox. Having cut back on Federal support programs for students coming into public health, we have had to rely increasingly on students who have to pay their own way. They are younger, brighter, and more dedicated than ever before, and increasingly they are more elitest. They look more and more like medical students. We need very much to have an increased number of students that come from minority and disadvantaged populations, and we need support for them.

The fifth point that I would like to make is that the policy initiatives that are characteristic of most of the health manpower bills under consideration are initiatives that really have to do with manipulation—in the public interest—of universities, of students and their careers in order to achieve better service for populations that have been bypassed by traditional modes of health services. I support those manipulations. I think they will be beneficial, but they are only a partial and a temporary answer.

We too often pretend that we do not know how to deliver services to neglected people. But the truth is we do know how, and we have done it time and again through one successful Federal demonstration program after another under OEO, under the special projects of title V, and increasingly under both rural and urban programs of local and district health departments. It would seem to me that we need move as rapidly as we can toward some kind of national commitment to extend those successful demonstrations to everyone whom we know will benefit from them. And the Federal Government's role comes increasingly one as residual guarantor to deliver those essential health services to people who are bypassed.

I'm completely confident with that kind of policy initiative we would have no problem with our training programs and with our students responding in a most supportive way.

Thank you.

Senator KENNEDY. That is excellent testimony, Doctor. It is absolutely on target. I am glad you stressed the importance of the whole area of public health. I think that was very valuable.

I am a great believer myself in those schools and what it can mean in terms of the general health of the American people. They have far too long been ignored. I think it offers enormous kind of opportunities to people. It is in these areas that are in a very highly technological society, and as we move on through with all the implications of future shock and the rest, it is going to be these public health kind of considerations that are going to be enormously difficult for this country to deal with.

We really want to be much more alert to them and aware of them. No one is minimizing the importance of the great contributions that medical schools made in the area of training personnel. It has been so distressing now where there have been cutbacks in many of these public health programs, as you well know, training personnel for the States, the cutbacks in the center for disease control, and many other parts that are troublesome and bothersome to many of us.

I think this was a very worthwhile emphasis. We would like to work closely with you on how that best can be achieved and done through manpower legislation or any other legislation.

Dr. MILLER. Thank you very much.

[The prepared statement of Dr. Miller follows:]

Statement on Health Manpower

By

C. Arden Miller, M.D.

Professor, School of Public Health

University of North Carolina

President, American Public Health Association

Before

The Subcommittee on Health

Committee on Labor and Public Welfare

United States Senate

Thursday, October 30, 1975

Mr. Chairman and Members of the Subcommittee.

I am C. Arden Miller, a physician and professor in the School of Public Health at the University of North Carolina. I serve this year as President of the American Public Health Association. I previously have served for six years as Dean of the Medical School at the University of Kansas, and then for five years as Vice-Chancellor for Health Sciences at the University of North Carolina.

My personal commitments are strongly in support of a heightened public accountability of agencies, including medical schools, that accept public support to serve the health needs of our country. During the years when I worked at the University of Kansas, all senior medical students were required to serve a preceptorship with a general practitioner in a rural community. At the same time faculty members were required to participate in circuit courses that presented programs of continuing medical education at rural centers which served eight different regions of the State.

In 1971, I co-authored a book entitled Heal Yourself. That book constituted the report of the Citizen's Board of Inquiry into Health Services for Americans. The report presented data on consumer attitudes, both satisfactions and dissatisfactions, toward health services.



Against the background of these interests, I present today my views on certain issues of legislation dealing with health manpower. The presentation focuses on some concerns that involve health manpower legislation and not with the specifics of the bills before your Subcommittee.

1. Geographic Maldistribution of Physicians

The national experience of recent decades is sufficient to affirm that increasing the number of physicians does not result in their dispersal to locales of greatest need. The national ratio of physicians to population has improved but their maldistribution has worsened. The national interest may be adversely served in other ways by an increased number of physicians. Collectively, their productivity as measured by patient visits has declined, but their average income has not fallen. One study reports that the average work week of suburban surgeons has fallen to an average of 34 hours per week, but their average annual incomes have been maintained at least at previous average levels. These circumstances suggest that increased numbers of physicians, without other policy initiatives, may contribute to inflation of medical costs.

The provision of doctors to underserved areas requires an aggressive new policy to influence maldistribution. The problem is national in scope; a national solution is required. More demonstrations and token endeavors have no place as a permanent national policy.

I support the concept of Federal Government's rendering financial support to students in medicine, dentistry and osteopathy in exchange for a period of obligatory service to underserved populations. The scholarships should be awarded directly to students and not on their behalf to their schools. The contract between DHEW and the student should invoke penalties sufficient to discourage "buying-out" of the contract. Underserved populations should be carefully defined in terms that include unfulfilled needs as well as limited access to services.

2. Distribution of Specialists

Available positions in medical specialty training programs are numerically distributed without relation to public need and exceed by far the number of physicians available to enter training. This circumstance produces medical specialists to excess in some fields (surgery), while deficiencies persist in others (primary care).

The many vacancies in residency programs also contribute to the inflow of foreign medical graduates. I support the establishment by DHEW of ceilings on the number and distribution of approved residencies for each specialty. Quotas would need to be established in close consultation with the Coordinating Council on Medical Education, bearing in mind the traditional failure of accrediting agencies and professional societies adequately to restrict the scope of programs under their own jurisdiction.

3. Support to Health Professional Schools

Medical schools and other health professional schools have abundantly demonstrated that their academic emphasis follows sources of support. They are only marginally supported through their own universities, and they are dependent in large measure on outside support. Nearly any outside support carries a quid pro quo. The National interest would be well served by Federal support that encouraged an educational emphasis toward primary and comprehensive community care. Such an emphasis could appropriately be made a condition of Federal support that was calculated on a student capitation basis.



4. Support for Public Health

Well-trained physicians are a necessary but insufficient resource to serve the health needs of the population. Physicians are effective in almost direct relationship to the supportive health services that surround them. Any health manpower policy that puts the physician in place but ignores support services makes extensive and frustrating mistakes. Any policy that focuses on primary medical and dental care without providing for the people who will plan, evaluate, administer, and support that care is doomed to expensive failure. The Nation moves toward national health insurance, compulsory health service on behalf of neglected populations, professional standards review, health planning in every community, and a renewed preventive emphasis as outlined in DHEW's new Forward Plan. The Nation also faces a future filled with new environmental health hazards and old hazards that are posed anew by inadequate sanitation, creaking water safety, and pathetically deficient immunizations. All of these endeavors cry for public health manpower of refined skills and burgeoning numbers. Not all of that manpower is prepared in schools of public health, but an impressive amount of it is and those health workers who are trained in business schools, community colleges, and technical training institutes

rely on concepts, teachers, and precedents that come from public health. Thankfully, schools of public health do not hold a monopoly on the credentialing of public health workers, as is true for medical and dental schools and their graduates. But that circumstance does not make support for public health education any less urgent in the national interest. An adequate health manpower bill would include:

- a. Institutional support for graduate schools of public health, most reasonably on a capitation basis;
- b. Project support for the various graduate programs within schools of public health; and
- c. Fellowship support for students especially minority and disadvantaged students. Schools of public health are not suffering from a dearth of well-prepared and able young students. They are smarter and more dedicated to public service than ever before but they are also more elitist because they must pay high educational costs. They do not recoup those costs with high incomes after their education is completed. Public health is a modestly paying profession. The national interest requires that an increased number of people from the populations

who represent the highest health risk enter graduate study to help share their insights for serving those populations.

The question is raised about whether graduates from schools of public health should serve a period of obligatory service in the same fashion as proposed for medical and dental graduates. I see no strong objection to such a requirement. In fact, I favor obligatory service of some sort by every person--teacher, engineer, construction worker--on behalf of the country. But I question that there is a selective need for public health graduates to be obligated for such service. They are not pulled by the same incentives as medical and dental graduates. The record would show that public health graduates go where the jobs are. They do not cluster in the economic security of suburbia.

We cannot endorse a health manpower bill that fails to provide support for public health education.

A final word need be said about the policy initiatives represented by the Health Manpower Bills before the Subcommittee. For the most part, they represent efforts to solve pressing problems of inadequate health services by manipulating universities, their students, and their anticipated



careers. I support those manipulations for the short-term advantages they will bring, and as a reasonable quid pro quo for extended public support. But, the benefits in terms of improved health services may be meager; as a long-range expanded health policy these measures are only a beginning and a stop gap. There are indeed many populations in rural areas and inner cities who are not reached by traditional modes of care. We should not pretend we do not know how to reach these people. One federally-sponsored demonstration project after another under OEO and Title V, and many public health departments in both rural and urban areas, have succeeded in reaching people who are by-passed by prevailing health services. Our Nation has backed away from extending the successful demonstrations to everyone who would benefit. The way to improve health services--is to improve health services under public sponsorship as may be necessary. Federal Government must accept its role as residual guarantor for the health services due every American. There is every indication that health manpower training programs and their graduates would respond positively to opportunities that would be generated by such a commitment.

Senator KENNEDY. Very, very helpful testimony. I want to thank you very much.

Our next witness is Laurel A. Cappa, national president, American Medical Student Association.

Senator Taft regrets he cannot be here. We want to extend warm words of welcome to you. He was in attendance yesterday and has been very, very active in this whole issue, so he will follow your testimony closely. We are glad to have you proceed.

**STATEMENT OF LAUREL A. CAPPA, NATIONAL PRESIDENT, AMERICAN MEDICAL STUDENT ASSOCIATION, STUDENT AT CASE WESTERN RESERVE SCHOOL OF MEDICINE; JOHN A. BARRASSO, STUDENT AT GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE; MICHAEL MADDEN, STUDENT AT GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE; AND J. TED NORRIS, IMMEDIATE PAST PRESIDENT, AMERICAN MEDICAL STUDENT ASSOCIATION, STUDENT AT UNIVERSITY OF TEXAS MEDICAL BRANCH, GALVESTON, TEX.**

Ms. CAPPA. I would like to have the other people here introduce themselves.

Mr. BARRASSO. I am John A. Barrasso from Pennsylvania and a student at Georgetown University School of Medicine in Washington. I am chairperson of the American Medical Student Association's Legislative Affairs Committee.

Mr. MADDEN. I am Michael Madden, a resident of the State of California and a medical student at Georgetown University. I am a member of AMSA's Legislative Affairs Committee.

Mr. NORRIS. I am Ted Norris from the University of Texas Medical Branch in Galveston, Tex., and am the immediate past president of what was SAMA and what is now AMSA.

Ms. CAPPA. By way of introduction, I might explain that you may already be familiar with the American Medical Student Association under its old name, the Student American Medical Association.

Senator KENNEDY. I had the opportunity to speak at their convention in California in 1972 and have always enjoyed working closely with these students.

Ms. CAPPA. At our 25th annual convention last year, our members voted to change the association's name from SAMA to AMSA. We are, and have been for years, a totally independent national medical student organization, but under our old name we were often assumed to be some student branch of the more vested interest groups in organized medicine.

The intent of the American Medical Student Association is to speak and act, not out of professional self-interest, but as responsible professionals acting in the interest of the American public in general and, specifically, in the interest of those Americans barred from health services by economic, geographic, or social barriers.

AMSA's current activities can all be grouped into two areas which interdigitate to a great extent.



The first is our growing concern with the dehumanized nature of medical education and health care delivery.

The second, which brings us here today, is our longstanding involvement in, and concern about, the geographic and specialty maldistribution problems which plague our country. We will not recite again the statistics that underline the gravity of the situation. You know these as well as we do.

AMSA has prepared an official position paper on health manpower legislation which you and your committee have already received, I believe. We do not intend to read that paper in its entirety now, but we would ask that it be included in any official record of our testimony today.

Senator KENNEDY. It will be made a part of the record.

Mr. BARRASSO. In brief, AMSA is proposing an eight-point plan.

First: We propose that institutional support to medical schools in the form of capitation grants be discontinued.

Obviously, the discontinuation of capitation payments would result in a tuition increase. The Secretary of the Department of Health, Education, and Welfare should be authorized to establish approved levels of tuition for each medical school. Approved tuition initially should not exceed the level of tuition and fees for the entering class of 1974 plus the actual amount of capitation support per student received by that school in 1974. This figure should be adjusted to allow for increases due to inflation. In succeeding years, the Secretary would review and approve any requests for increased tuition levels. All such requests should be made public at the time of submission to the Secretary. Maintenance of effort by States as well as maintenance of private support should be required by law.

Two: We propose that sufficient funds for a scholarship program providing tuition plus a living allowance be authorized by Congress.

The scholarships available under this program would be similar to the Public Health and National Health Service Corps scholarship training program scholarships. Every medical student wishing to take part would initially receive a yearly amount equal to the "approved tuition" for his/her school plus \$4,000 for books and living expenses. Cost-of-living adjustments for expenses would be made, if indicated, in subsequent years. Upon completion of training—including graduate residency training to the greatest extent possible—students would repay the support they received by one of two mechanisms:

(a) In return for each year of scholarship support, a student would agree to serve for 6 months, with a minimum service period of 2 years, in a physician shortage area. The student would work as a civilian member of the National Health Service Corps, as a member of the Commissioned Corps of the Public Health Service or through private practice in a designated shortage area.

(b) Students unwilling to serve in shortage areas would repay in dollars twice the amount received as scholarship support plus accrued interests.

As AMSA's primary intent is to encourage young physicians to serve in shortage areas, AMSA's members and officers have debated whether the scholarship program should have any repayment provisions other than service.



It is our feeling, based on the current demand for the Public Health and National Health Service Corps scholarship training program scholarships, that the overwhelming majority of students would choose service rather than direct repayment. Therefore, it was concluded that a repayment provision would not undermine the goal of providing services to communities in need. Allowing repayment in dollars also obviates the necessity of a review board of some type to consider cases of true hardship since these individuals could repay in dollars.

Any scholarship recipient refusing to repay support in either service or dollars would be subject to loss of license. Scholarship recipients would not be required to repay their grants if they did not complete their undergraduate study.

If Congress should fail to appropriate adequate funds for the scholarship plan, a program providing federally guaranteed loans for amounts equal to the scholarships should be automatically instituted. Repayment provisions would be the same as those for the scholarship plan.

Three: The criteria for designated "shortage areas" should be expanded to include more of our Nation's needy areas and to accommodate the increased pool of physicians willing to serve.

The definition of "physician shortage areas" should be broadened to include inner-city areas where social and economic barriers to health care exist, migrant health centers, Veterans' Administration and Public Health Service hospitals and clinics, Indian Health Service facilities, State and Federal prisons, State mental hospitals, free clinics, neighborhood and community health centers, and other areas and institutions that lack qualified physicians.

Any group or person should be able to request that a population be designated a medically underserved area. In considering such an application the following factors should be considered: (a) the ratio of available physicians to the population; (b) indicators of the accessibility and availability of health services for that population; (c) indicators of the health status of the population; and (d) indicators of the need and demand for health services of the population.

The population should not have to conform to the geographical area of any political subdivision, nor should the ability of the population to pay for health services be a factor in the designation of shortage areas.

These criteria would allow services to be provided in communities where social and economic barriers prevent access to services available to other segments of the community. They will also prevent local medical groups from blocking NHSC-type projects simply out of professional self-interest.

Four: We propose that national and regional health manpower councils be established.

These councils would have the power to establish the total number of graduate—that is, residency—positions available, the total of which should not exceed 125 percent of the number of U.S. medical graduates for that year.

Senator KENNEDY. Is this under HEW?

Mr. BARRASSO. We prefer HEW. We think CCME is more of a vested interest group. Thus, we prefer HEW. We also recommend that

50 percent of those completing a specialty training program be in family practice, general internal medicine, general pediatrics and general obstetrics and gynecology.

The national and regional health manpower councils should also be charged with the ongoing assessment of physician specialty distribution, the development of collaborative working relationships with the various specialty organizations and the assessment of need for financial support to graduate primary care training programs.

Five: Measures should be taken to decrease the current drain of physicians from other countries.

It is reasonably certain that with the recent increases in medical school enrollments, the United States can adequately meet its own physician manpower needs. Thus, the United States should take steps to halt the ethically questionable practice of encouraging foreign physicians to immigrate to the United States.

AMSA recognizes that our country's heritage is based on the right to immigrate. It also recognizes that our country has a responsibility to assist other countries, especially the developing nations, to improve their levels of medical education, medical practice, and public health. AMSA recommends the end of preferential immigration status for physicians. We also recommend the establishment of educational programs for foreign medical graduates that are more consistent with their needs and with the intent of international exchange legislation.

Specifically, AMSA recommends that the admission of foreign medical graduates as exchange visitors be limited to the defined purposes and time period authorized by Department of State regulations for exchange visitor programs. Congress should reconsider those amendments to the 1970 Immigration and Naturalization Act—Public Law 91-225—that allow foreign medical graduates to convert temporary visas granted for educational and cultural exchange purposes to permanent immigration visas. AMSA also recommends that Congress reconsider those amendments to the 1965 Immigration Act that give priority to people with professional and technical skills.

Six: Special project grants should be made available to medical schools for the establishment of area health education centers and other remote site training projects.

Physicians are more likely to practice in underserved areas if they have been exposed early in their training to the rewards of such practice and if they can maintain links to training institutions. Area health education centers have been successful in exposing students to medical practice away from large medical centers and in providing continuing education and backup to practicing physicians in rural areas.

AMSA supports the development of further area health education centers or similar regional medical centers and the establishment of high quality primary care preceptorship programs for all medical students.

Seven: We propose that special project grants be made available to medical schools for the sponsorship of programs designed to recruit, admit, retain, and graduate increased numbers of minority and disadvantaged students.

AMSA's definition of "recruitment" includes programs designed to help students become qualified for admission by overcoming previous



educational disadvantages. AMSA also recommends low-interest subsidized loans for these students so they can enter and remain in preparatory programs.

AMSA fears that the resolve of medical schools to admit and graduate more minority students is weakening. Therefore, AMSA urges Congress to take appropriate measures to insure that all segments of our general population are equitably represented in the medical profession.

Eight: Special project grants should be made available to medical schools for the sponsorship of programs designed to transfer to the United States with advanced standing those American students—U.S. citizens—enrolled in foreign medical schools before July 1, 1975.

The objective of such projects should be to integrate these students into the American medical education system, thus more fully utilizing this valuable resource pool. Required remedial work should be provided by these programs.

Ms. CAPP. We are aware, Senator Kennedy, that you are considering a proposal whereby capitation payments directly to the schools will be retained and whereby a certain percentage of entering students will be obligated to serve. We, as medical students, find this mechanism particularly frightening as we see a real potential for the creation of a two-class medical education system especially if it is left to the schools to decide who shall serve and who shall not. It will be very easy for the medical schools to admit those students that are particularly “desirable” from the school’s point of view—the future academicians and researchers, the sons and daughters of alumni and so forth—with promises that they need not serve while the less desirable students from the school’s point of view—those with primary care interests, those from economically disadvantaged backgrounds, the minority students, and so forth—will be admitted only if they agree to shortage area service. Also, with the ever-increasing tuition and living costs, and the ever-dwindling loan and scholarship possibilities, the minority and economically disadvantaged students will do all the service while the rich will be at little or no risk for service.

We do not feel service in needy areas should be viewed as a burden. Attention to public need should be a responsibility of the entire medical profession. However, we would strongly protest any mechanisms that place this responsibility solely on a particular group—in this case, poor and/or minority students.

Thus, it is extremely important that scholarships be available for all students wishing them. A program which reduced or eliminated capitation and failed to make scholarships available to all students could not help but create a two-class medical education system.

The program we have proposed would allow all medical school admissions to be based on the applicant’s qualifications and commitment to the profession of medicine rather than on the ability of the applicant or his or her family to finance that education.

I might add, Senator, that we feel it has been exceptionally well documented that Federal intervention via capitation grants does little or nothing to alleviate the specialty and geographic maldistribution problem. You are undoubtedly familiar with the January 1974, study by the Institute of Medicine entitled “The Costs of Education in the



Health Professions." However, we would again call your attention to the conclusions of that study regarding the lack of effectiveness of capitation grants especially since that study was mandated by Congress. The Institute of Medicine study group concluded:

After considering whether future legislation should continue to link capitation awards to specific objectives, it is the judgment of the study group that capitation grants are of limited effectiveness in achieving quantitative objectives other than expanded enrollment . . . the study group believes that capitation programs can alter only slightly the geographic and specialty distribution of health professionals . . .

Conclusions: The benefits of the proposals set forth in this position paper are obvious. For the first time, America would have a national plan for utilizing health manpower resources in a manner that serves the public interest. By appropriately linking the financing of medical education to programs that meet our Nation's medical needs, this system would orient the new physician to a system based on the needs of patients rather than those of providers.

It seems clear that the Federal Government will expand the public's economic entitlement to health care through a national health insurance program. AMSA's proposed system would guarantee that all Americans could exercise this entitlement by having access to services. The medicare and medicaid experience should lead us to understand that a national health insurance program that provides equal financial access without guaranteeing availability of needed services to all Americans is worthless.

AMSA's proposals also would provide an adequate and stable supply of funds for medical schools, which, according to Representative Paul Rogers, Democrat of Florida, author of H.R. 5546, is the primary reason he supports capitation grants. They would provide equal financial access to a medical education for all socioeconomic groups and would eliminate the destructive economic struggle many medical students now have to endure.

AMSA's proposals also would insure that U.S. reliance on foreign trained physicians would end and that those foreign physicians who come here for educational training, in fact, would get what they are seeking.

Finally, this is a proposed system that, from an administrative standpoint, appears practical and that is attractive to physicians in training. The major cost is the initial expenditure for the scholarship programs, which would be reduced dramatically after the program is in full operation. In the long run it would be more practical than current support methods.

The most important benefit of AMSA's proposal, however, is that individuals and communities requiring health care would receive it. This alone should be the ultimate goal of any health manpower plan and the most convincing reason for acting on our recommendations.

Thank you for the opportunity to speak with you.

Senator KENNEDY. Do the others have anything to say?

Mr. NORRIS. I would like to make a quick comment. When the Senator from Vermont was introducing the dean of the medical school from Vermont today, he mentioned the fact that he appreciated the dean being here to help this committee address the problems of the medical schools.

We are really worried that many of the problems being addressed by some of the suggestions made this morning are more problems of the medical schools than of the public. Many of the suggestions that were made were some that we hear frequently from academic institutions. I am thinking of the fact that many of these institutions feel they are the ones who should logically produce the professors and academicians leaving to somebody else the idea of producing practitioners.

Senator KENNEDY. You think each should do it?

Mr. NORRIS. I think each should do it. For many reasons—the total number of practitioners needed and the fact that the prestige, therefore, in current systems tend to go toward those that are creating academicians as opposed to practitioners. Capitation grants also are pretty self-serving and have been shown not to serve the public. Many were talking about family practice residencies saying the requirements for them should be more flexible. We know historically the reason the medical institutions wanted that flexibility is because they have not had primary care sorts of people on their faculties.

We are very cynical of not having specifically family practice residencies included in the requirements. We feel this is an effort to sidestep the responsibility that you are trying to address with your health manpower programs.

Also, the idea of quotas, the 25 and 50 percent. It's very convenient for medical schools not to have to mold the attitudes of the other students as they are going through school. To say when they sign up, those students have already made that decision, 25 or 50 percent, or how many. Medical schools could and certainly they should try to influence students toward seeing the value of primary care by exposing them to areas where they would tend to choose primary care for rural areas and other needs within the public interest.

Senator KENNEDY. The argument some medical schools have put forward that they have developed the capacity and the expertise to provide for the national interest the best acclaimed and most highly qualified researchers and academicians, you do not think carries much water or should carry much water?

Mr. NORRIS. No.

Senator KENNEDY. In terms of equitable policy?

Mr. NORRIS. I do not think it is equitable, No. 1. I think you could probably count on one hand the number of schools that take a great deal of pride in putting out practitioners. Researchers are predominantly the people that are teaching in medical schools and they consider themselves primarily as trying to turn out the researcher, the technologist, as opposed to the practitioner, and as long as prestigious schools are allowed to keep that—not having to get out in the real world and produce practitioners—that is going to be the ideal. And it is going to have a debilitating influence on the overall purpose of what you are trying to do.

Senator KENNEDY. Let me ask you, under your program, would every student then have a scholarship?

Ms. CAPP. Anyone who wishes one. Based especially on the experience of the Public Health and National Health Service Corps physi-



cian training scholarship program, and having read just recently that they expect 11,000 applications for 1,000 scholarships this year, we would estimate that at current tuition levels, and assuming under our program that with the end of capitation the tuition level would rise, we would estimate 90 percent of the students would probably be interested in such a program. I might add we have just finished a series of four workshops across the country, and we have found a great deal of support for this kind of program among students throughout the Nation.

Senator KENNEDY. I certainly support that as well. It is just not feasible given the reality of the appropriation process, we just could not get the resources particularly now to do it. It is basically almost double the amount of resources that we are going to have available for manpower. Those are the hard realities. That is what we are dealing with.

Ms. CAPP. That was one of our reasons for suggesting a much lower stipend than is currently—

Senator KENNEDY. I do not think you are still going to make it. I will be glad to cost it out with your people. I still do not think you would get there. But give us what data you have. I would be interested in it. It is just a hard decision.

Ms. CAPP. We realize the startup costs are the biggest problem in terms of amount of funding that would be required. In a number of years, that would be significantly diminished as people start returning funds back through service.

Senator KENNEDY. How do you stand on licensure, recertification?

Ms. CAPP. We favor universal licensing exams and have been very supportive of efforts for continuing education and recertification.

Senator KENNEDY. Well, let me just say that I have found in my limited time as chairman of this committee that your organization has been a real leader in this whole area. It has always been in terms of trying to develop a national policy to meet these particular needs. It is interesting to me to listen to AMA come in and say what they thought was in your best interest time and again. And when you people were coming in and addressing these issues at your conventions and passing resolutions, which are tough resolutions, I thought it was enormously reassuring.

I think many people who really wonder and question about the commitment of young people and also are willing to make comments just generally about the medical profession, because I think time and time again your organization is really leading the way and we are glad to have you here.

I think you have really thought about it in a serious comprehensive way and really put the interest of the country first. So, we are glad to have your testimony.

We would like to get the specific data. You can get together with the staff on that and let us just see where they are.

Thank you very much.

Ms. CAPP. Thank you.

[The prepared statement of Ms. Cappa and the position paper of the American Medical Student Association follows:]



AMERICAN MEDICAL STUDENT ASSOCIATION

1400 Hicks Road  
Rolling Meadows, Illinois 60008

STATEMENT OF

LAUREL A. CAPPA  
NATIONAL PRESIDENT  
AMERICAN MEDICAL STUDENT ASSOCIATION

AND

JOHN BARRASSO  
CHAIRMAN  
LEGISLATIVE AFFAIRS COMMITTEE  
AMERICAN MEDICAL STUDENT ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON HEALTH  
COMMITTEE ON LABOR AND PUBLIC WELFARE

UNITED STATES SENATE

THURSDAY, OCTOBER 30, 1975

Senator Kennedy, Gentlemen:

By way of introduction, I might explain that you may already be familiar with the American Medical Student Association under its old name, the Student American Medical Association. At our 25th Annual Convention last year, our members voted to change the Association's name from SAMA to AMSA. We are, and have been for years, a totally independent national medical student organization, but under our old name we were often assumed to be some student branch of the more vested interest groups in organized medicine.

The intent of the American Medical Student Association is to speak and act, not out of professional self-interest, but as responsible professionals acting in the interest of the American public in general and, specifically, in the interest of those Americans barred from health services by economic, geographic, or social barriers.

AMSA's current activities can all be grouped into two areas which interdigitate to a great extent.

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The first is our growing concern with the dehumanized nature of medical education and health care delivery.

The second, which brings us here today, is our long standing involvement in, and concern about, the geographic and specialty maldistribution problems which plague our country. We will not recite again the statistics that underline the gravity of the situation. You know these as well as we do.

AMSA has prepared an official position paper on health manpower legislation which you and your committee have already received, I believe. We do not intend to read that paper in its entirety now, but we would ask that it be included in any official record of our testimony today.

We would, if you please, like to reiterate the objectives that we used in developing our position paper and that we feel should be met in any health manpower bill that Congress finally adopts.

They are:

1. Redistribution of adequate numbers of physicians to areas  
of critical need.



2. Production of adequate numbers of primary care practitioners with concomitant reductions in overcrowded specialties.
3. Fulfillment of America's medical manpower needs through the education of adequate numbers of its own citizens for medical careers.
4. Ultimate student responsibility for the financing of their medical education through service in underserved areas or through direct payment of true educational costs.
5. Equal treatment of all socioeconomic, cultural, and racial groups with regards to access to health care and access to medical education.
6. Appropriate incentives for the institutional reform of medical education directed at public needs in health care.

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7. Avoidance of constitutional issues that would impede passage of the legislation or delay implementation.

The American Medical Student Association has analyzed the bills currently before Congress as well as other proposals for a national health manpower policy. It is our conclusion that the concepts incorporated in Senate Bill 991, with modifications, would be most effective in achieving the objectives outlined above and thereby meeting the health manpower needs of this nation.

In brief, AMSA proposes that:

A. Institutional support to medical schools in the form of capitation grants be discontinued.

Obviously, the discontinuation of capitation payments would result in a tuition increase. The Secretary of the Department of Health, Education and Welfare should be authorized to establish approved levels of tuition for each medical school. "Approved tuition" initially should not exceed

the level of tuition and fees for the entering class of 1974 plus the actual amount of capitation support per student received by that school in 1974. This figure should be adjusted to allow for increases due to inflation. In succeeding years, the Secretary would review and approve any requests for increased tuition levels. All such requests should be made public at the time of submission to the Secretary. Maintenance of effort by states as well as maintenance of private support should be required by law.

2.  
B. Sufficient funds for a scholarship program providing tuition plus a living allowance be authorized by Congress.

The scholarships available under this program would be similar to the Public Health and National Health Service Corps Scholarship Training Program scholarships. Every medical student wishing to take part would initially receive a yearly amount equal to the "approved tuition" for his/her school plus \$4,000 for books and living expenses. Cost-of-living adjustments for expenses would be made, if indicated, in subsequent years.



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Upon completion of training (including graduate residency training to the greatest extent possible), students would repay the support they received by one of two mechanisms:

- a. In return for each year of scholarship support, a student would agree to serve for six months, with a minimum service period of two years, in a physician shortage area. The student would work as a civilian member of the National Health Service Corps, as a member of the Commissioned Corps of the Public Health Service or through private practice in a designated shortage area.
- b. Students unwilling to serve in shortage areas would repay in dollars twice the amount received as scholarship support plus accrued interest.

As AMSA's primary intent is to encourage young physicians to serve in shortage areas, AMSA's members and officers have debated whether the scholarship program should have any repayment provisions other than service.

- 7 -

It is our feeling, based on the current demand for the Public Health and National Health Service Corps Scholarship Training, that the overwhelming majority of students would choose service rather than direct repayment. Therefore, it was concluded that a repayment provision would not undermine the goal of providing services to communities in need. Allowing repayment in dollars also obviates the necessity of a review board of some type to consider cases of true hardship since these individuals could repay in dollars.

Any scholarship recipient refusing to repay support in either service or dollars would be subject to loss of license. Scholarship recipients would not be required to repay their grants if they did not complete their undergraduate study.

If Congress should fail to appropriate adequate funds for the scholarship plan, a program providing federally guaranteed loans for amounts equal to the scholarships should be automatically instituted. Repayment provisions would be the same as those for the scholarship plan.

3.  
c. The criteria for designated "shortage areas" be expanded to include more of our nation's needy areas and to accommodate the increased pool of physicians willing to serve.

The definition of "physician shortage areas" should be broadened to include inner-city areas where social and economic barriers to health care exist, migrant health centers, Veterans Administration and Public Health Service hospitals and clinics, Indian Health Service facilities, state and federal prisons, state mental hospitals, free clinics, neighborhood and community health centers and other areas and institutions that lack qualified physicians.

Any group or person should be able to request that a population be designated a medically underserved area. In considering such an application the following factors should be considered:

- a. the ratio of available physicians to the population.
- b. indicators of the accessibility and availability of health services for that population.



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c. indicators of the health status of the population.

d. indicators of the need and demand for health services of the population.

The population should not have to conform to the geographical area of any political subdivision, nor should the ability of the population to pay for health services be a factor in the designation of shortage areas.

These criteria would allow services to be provided in communities where social and economic barriers prevent access to services available to other segments of the community. They will also prevent local medical groups from blocking NHSC-type projects simply out of professional self-interest.

4.  
D. National and Regional Health Manpower Councils be established.

These councils would have the power to establish the total number of graduate (i.e., residency) positions available, the total of which should not exceed 125 percent of the number of U.S. medical graduates for that

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year, and to assign those positions to the various categories of specialty and subspecialty practice. These councils should also be empowered to award special priority grants to facilitate expansion or development of programs to train family physicians in regions with relative shortages of physicians. AMSA recommends that 50 percent of those completing a specialty training program be in family practice, general internal medicine, general pediatrics and general obstetrics and gynecology.

The National and Regional Health Manpower Councils should also be charged with the ongoing assessment of physician specialty distribution, the development of collaborative working relationships with the various specialty organizations and the assessment of need for financial support to graduate primary care training programs.

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E. Measures be taken to decrease the current drain of physicians from other countries.

It is reasonably certain that with the recent increases in medical school enrollments, the United States can adequately meet its own physician manpower needs. Thus, the United States should take steps to halt the ethically

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questionable practice of encouraging foreign physicians to immigrate to the United States.

AMSA recognizes that our country's heritage is based on the right to immigrate. It also recognizes that our country has a responsibility to assist other countries, especially the developing nations, to improve their levels of medical education, medical practice and public health. AMSA recommends the end of preferential immigration status for physicians. We also recommend the establishment of educational programs for FMGs that are more consistent with their needs and with the intent of international exchange legislation.

Specifically, AMSA recommends that the admission of foreign medical graduates as exchange visitors be limited to the defined purposes and time period authorized by Department of State regulations for exchange visitor programs. Congress should reconsider those amendments to the 1970 Immigration and Naturalization Act (PL 91-225) that allow FMGs to convert temporary visas granted for educational and cultural exchange



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purposes to permanent immigration visas. AMSA also recommends that Congress reconsider those amendments to the 1965 Immigration Act that give priority to people with professional and technical skills.

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6. Special project grants be made available to medical schools for the establishment of Area Health Education Centers and other remote site training projects.

Physicians are more likely to practice in underserved areas if they have been exposed early in their training to the rewards of such practice and if they can maintain links to training institutions. Area Health Education Centers have been successful in exposing students to medical practice away from large medical centers and in providing continuing education and back-up to practicing physicians in rural areas.

AMSA supports the development of further Area Health Education Centers or similar regional medical centers and the establishment of high quality primary care preceptorship programs for all medical students.

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7.  
a. Special project grants be made available to medical schools for the sponsorship of programs designed to recruit, admit, retain, and graduate increased numbers of minority and disadvantaged students.

AMSA's definition of "recruitment" includes programs designed to help students become qualified for admission by overcoming previous educational disadvantages. AMSA also recommends low-interest subsidized loans for these students so they can enter and remain in preparatory programs.

AMSA fears that the resolve of medical schools to admit and graduate more minority students is weakening. Therefore, AMSA urges Congress to take appropriate measures to ensure that all segments of our general population are equitably represented in the medical profession.

8.  
b. Special project grants be made available to medical schools for the sponsorship of programs designed to transfer to the United States with advanced standing those American students (U.S. citizens) enrolled in foreign medical schools before July 1, 1975.

The objective of such projects should be to integrate these students into the American medical education system, thus more fully utilizing this

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valuable resource pool. Required remedial work should be provided by these programs.

We have heard, Senator Kennedy, that you may be considering a proposal whereby capitation payments directly to the schools will be retained and whereby a certain percentage of entering students will be obligated to serve. We, as medical students, find this mechanism particularly frightening as we see a real potential for the creation of a two-class medical education system especially if it is left to the schools to decide who shall serve and who shall not. It will be very easy for the medical schools to admit those students that are particularly "desirable" from the school's point of view - the future academicians and researchers, the sons and daughters of alumni and so forth - with promises that they needn't serve while the less desirable students from the school's point of view - those with primary care interests, those from economically disadvantaged backgrounds, the minority students, and so forth - will be admitted only if they agree to shortage area service. Also with the ever increasing tuition and living costs, and the ever



dwindling loan and scholarship possibilities, the minority and economically disadvantaged students will do all the service while the rich will be at little or no risk for service.

We do not feel service in needy areas should be viewed as a burden. Attention to public need should be a responsibility of the entire medical profession. However, we would strongly protest any mechanisms that places this responsibility solely on a particular group - in this case, poor and/or minority students.

Thus it is extremely important that scholarships be available for all students wishing them. A program which reduced or eliminated capitation and failed to make scholarships available to all students could not help but create a two class medical education system.

The program we have proposed would allow all medical school admissions to be based on the applicant's qualifications and commitment to the profession of medicine rather than on the ability of the applicant or his or her family to finance that education.

I might add, Senator, that we feel it has been exceptionally well documented that federal intervention via capitation grants does little or nothing to alleviate the specialty and geographic maldistribution problem. You are undoubtedly familiar with the January, 1974, study by the Institute of Medicine entitled "The Cost of Education in the Health Professions." However, we would again call your attention to the conclusions of that study regarding the effectiveness of capitation grants especially since that study was mandated by Congress.

The Institute of Medicine study group concluded:

"After considering whether future legislation should continue to link capitation awards to specific objectives, it is the judgement of the study group that capitation grants are of limited effectiveness in achieving quantitative objectives other than expanded enrollment...the study group believes that capitation programs can alter only slightly the geographic and specialty distribution of health professionals..."

#### CONCLUSIONS

The benefits of the proposals set forth in this position paper are obvious. For the first time, America would have a national plan for utilizing health manpower resources in a manner that serves the public

interest. By appropriately linking the financing of medical education to programs that meet our nation's medical needs, this system would orient the new physician to a system based on the needs of patients rather than those of providers.

It seems clear that the federal government will expand the public's economic entitlement to health care through a national health insurance program. AMSA's proposed system would guarantee that all Americans could exercise this entitlement by having access to services. The Medicare and Medicaid experience should lead us to understand that a national health insurance program that provides "equal financial access" without guaranteeing availability of needed services to all Americans is worthless.

AMSA's proposals also would provide an adequate and stable supply of funds for medical schools, which, according to Rep. Paul Rogers (D-Fla.), author of H.R. 5546, is the primary reason he supports capitation grants. They would provide equal financial access to a medical education for all socio-



economic groups and would eliminate the destructive economic struggle many medical students now have to endure.

AMSA's proposals also would ensure that U.S. reliance on foreign trained physicians would end and that those foreign physicians who come here for educational training, in fact, would get what they are seeking.

Finally, this is a proposed system that, from an administrative standpoint, appears practical and that is attractive to physicians-in-training. The major cost is the initial expenditure for the scholarship programs, which would be reduced dramatically after the program is in full operation. In the long run it would be more practical than current support methods.

The most important benefit of AMSA's proposal, however, is that individuals and communities requiring health care would receive it. This alone should be the ultimate goal of any health manpower plan and the most convincing reason for acting on our recommendations.

Thank you for your kind attention.

AMERICAN MEDICAL STUDENT ASSOCIATION

1400 Hicks Road  
Rolling Meadows, Illinois  
60008

HEALTH MANPOWER LEGISLATION

The Position of the  
American Medical Student Association

Approved by the Board of Trustees  
September 14, 1975

Laurel A. Cappa, National President  
John Barrasso, Chairman,  
Legislative Affairs Committee

INTRODUCTION

The American Medical Student Association (AMSA), formerly the Student American Medical Association, is a totally independent medical student organization dedicated to improving medical education, health care services and health care delivery. It has approximately 18,000 members at 114 of the medical schools in this country.

AMSA has a long history of working to alleviate such health manpower problems as geographic and specialty maldistribution. Through its National Health Student Health Projects, AMSA has exposed more than 6,000 students in health professions to innovative systems for delivering primary care in underserved areas. AMSA has chosen project sites where health care has been unavailable or inaccessible--Appalachia, Indian reservations, migrant camps, small communities. Many of the students who worked at these sites have returned to practice in such shortage areas after their training.

AMSA also provided support for the legislation that created the National Health Service Corps (NHSC), the only program ensuring that many underserved communities have the health manpower they need. Through the AMSA/NHSC Advocacy Program, AMSA has helped train 650 house officers in primary care training programs to be recruiter-advocates for the Corps. This program recruits physicians for the Indian Health Service, Bureau of Medical Services, federal prisons, the Coast Guard and Public Health Service hospitals as well as for the Corps.

AMSA has developed this position paper on health manpower legislation for the same reason that it has worked to alleviate specialty and geographic maldistribution: AMSA is speaking and acting, not out of professional self-interest, but in the interest of the American public in general and, specifically, in the interest of those Americans barred from health services by economic, geographic or social barriers.



STATEMENT OF THE PROBLEM

Many of today's health manpower problems can be traced back to the 1950s and 1960s, when organized medicine deliberately limited our country's physician supply. This professional birth control led to what many health authorities perceived as a "doctor shortage." Fear of a long-term physician shortage led to a boom in medical school building as well as to a push for expanded enrollments in existing schools. From 1960 to 1973, medical schools increased their annual output of new doctors by 47 percent.

But the production of more doctors has not solved America's complex health manpower needs. We still face the serious problems of geographic maldistribution (too many physicians in a few places and too few in too many places) and specialty maldistribution (too many specialists and too few primary care physicians).

Such federal programs as Medicare and Medicaid have removed many economic barriers to obtaining health care. However, the geographic and specialty maldistribution of health manpower means that many Americans, particularly those in rural and inner-city areas, cannot get the health services they need and expect.

Americans everywhere, regardless of economic status, often cannot find primary care physicians to attend to basic health needs.

The shortage of American-trained physicians has led to another problem--an overdependence on foreign medical graduates (FMGs). The number of FMGs in this country has skyrocketed in the past ten years. Last year one of every three doctors in a graduate training program was an FMG, as was one of every five doctors in practice. The percentage of foreign doctors from developing countries also has increased. In 1965, 10 percent of all FMGs were Asians. In 1971, 67 percent were.

Undeniably, foreign doctors have made significant contributions to American health care. However, the recruitment of physicians from less developed countries by the world's most affluent nation raises serious ethical questions. Many developing countries have manpower needs much more acute than those of the United States. Such countries can ill afford to finance the education of a physician only to lose him to another country.

In formulating its position on health manpower, AMSA has addressed the distinct problems of an absolute shortage of doctors, a relative shortage caused by specialty and geographic maldistribution and an over-reliance on FMGs.

#### IMPERFECTIONS IN THE HEALTH CARE MARKET: A RATIONALE FOR FEDERAL INTERVENTION

Some health authorities assume that the medical marketplace will deal adequately with the distribution of physicians by specialty and geographic area. Illustrative perhaps is this recent quote by C.H. William Ruhe, Director of the Division of Medical Education of the American Medical Association (AMA): "Not everybody can be a physician, but then not everybody can be a big league baseball player or opera star...The market place and the public will decide how many of each kind..." In classical economic theory, distribution of supply is a function of the market. However, for the market to act appropriately, classical economic theory dictates certain assumptions--rationality of the decision maker, existence of a market and perfect competition. The health care market does not meet these assumptions.

A. Rationality of the Decision Maker. This simply means that the purchaser will be able to discern the marginal utility of various goods and services and will select those with maximum utility. If A has more utility than B and B more than C, then the purchaser will prefer A to C. Rationality also implies using a minimum amount of resources to get a maximal number of purchases.

This assumption of consumer rationality is not valid in the health care marketplace. An individual cannot choose between physicians or hospitals on the basis of whether one better suits his needs. The health care consumer often does not know what his needs are. Furthermore, the health care consumer does not know whether the price is appropriate or even what the price will be. Since the consumer cannot judge his own need, the physician--or supplier--is able to control demand. Physicians thus are able to concentrate in metropolitan areas and treat selected segments of the general population without fearing a loss of income. It is not surprising that the physician's role as both advisor of need and producer of services leads to overconsumption.

A number of studies document the phenomenon of physician-determined demand. Surgery appears to be a classic example, even though it is difficult to prove that "excess" surgical capacity leads to "unnecessary" surgery. However, the United States has twice as many surgeons per 100,000 population as does Great Britain, and U.S. surgeons perform twice as many operations in proportion to the population. Recent evidence shows that physicians paid on a fee-for-service basis perform 70 percent more surgical procedures than those "operating" under a prepaid plan.

B. Existence of a Market. This does not refer to a fixed structure, but to a system that serves as the unbiased arbiter of supply and demand, i.e., Adam Smith's "Invisible Hand." The "market," if unimpeded by institutional or legal constraints, signals a need for increased production when there is shortage and conversely suggests curtailment in times of surplus. The market concept also implies choice and an ability and willingness on the part of a consumer and producer to participate.



In the classical sense of the term, there is no health market for consumers. For many rural and inner-city dwellers, for many elderly persons and minority groups, there are simply no health services available. Even in well served areas, the health care consumer rarely has a choice of producer.

Part of the process of market adjustment or demand is an increase in supply, which implies a freedom of entry for new producers that also is not characteristic of the American medical care system. The number of students entering medical schools has until recently been artificially limited, ostensibly because of "quality" considerations. Yet the standards for "quality" medical students have been quite arbitrary.

A study by the Association of American Medical Colleges (AAMC) indicates that, of roughly 40,000 applicants for 14,000 first-year positions in 1973, approximately 75 percent were "qualified," that is, they were capable of mastering the academic work of medical school. Further, none of the studies that have been done regarding actual physician performance indicate that the qualifications used to screen medical school applicants, such as grades and Medical College Aptitude Test (MCAT) scores, relate to quality physician performance. Yet, even in the sixties, the American Medical Association (AMA) was testifying in Congressional hearings against expanded enrollments on the grounds that they would lower the quality of medical graduates.

Other artificial barriers also prevent supply from flowing when and where needed. These include the use of geographical residence to limit eligibility for admission to medical school, licensing arrangements, hospital privileges, etc.

C. Perfect Competition. A perfectly competitive market is the cornerstone of free enterprise. Rapid response of supply and demand is considered a necessary characteristic of perfect competition, which is thought to motivate economic efficiency.

But the supply of health care, as we have seen, is not responsive, and the demand for health services is controlled by the providers, not the consumers. In addition, most economists characterize demand for health care as inelastic, i.e., an increase in price does not necessarily lead to a reduction in demand. Health care involves emotionally charged concerns. Consumers will not take the same risks with their medical needs that they will with other products. Inelastic demand also results from the presumed necessity surrounding the consumption of health care and the lack of substitutable products.

There are other indications of less than perfect competition. Indeed, physician-pricing practices often are cited as a standard textbook example of a discriminating monopoly. Further, it is considered unethical for physicians to advertise because, it is argued, lower prices, if allowed, might encourage less professional services.

In summary, it is evident that the medical market is unable to distribute physicians by specialty and geographic area. In addition, there are strong institutional forces working against appropriate distribution.

THE HISTORY OF FEDERAL INTERVENTION: THE FAILURE OF INSTITUTIONAL SUPPORT TO  
SERVE THE PUBLIC INTEREST

In trying to intervene in the health market to resolve health manpower problems, the federal government traditionally has focused on the institutions that train health professionals. This concentration on institutional support began in 1960, when the Department of Health, Education and Welfare developed an \$8-million health manpower training program. At that time, health authorities, convinced that the health manpower supply was not keeping pace with population growth, concluded that federal assistance was needed for building more medical schools and for expanding and renovating the facilities of existing schools.

In 1963, Congress enacted the Health Professions Educational Assistance Act, which authorized loans for students of medicine, osteopathy and dentistry and which provided construction funds for renovating and expanding existing schools. The expanded funds were tied to a requirement for increased enrollments. However, these measures soon proved to be inadequate for assuring the needed increase in health manpower.

In 1965, Congress, officially recognizing that health profession schools serve a national need, enacted a program that provided institutional support to relieve the financial difficulties of many schools, improve student-faculty ratios, attract more highly qualified faculty and strengthen basic curricula. This support was tied to a requirement to expand enrollments again.

In 1967, according to Congressional reports, there still was a severe shortage of manpower. By 1968, the manpower situation was referred to as an emergency.



In that year, Congress passed a health manpower act that authorized higher levels of institutional support, with 45 percent of the funds designated for basic institutional grants tied to required expansion of enrollment and 55 percent earmarked for schools with serious financial problems.

Three years later, a Carnegie Commission report, "Higher Education and the Nation's Health," demonstrated that the American people's health status was below that of citizens of other developed nations. The report's authors concluded that more health personnel should be trained, particularly in geographic areas with severe manpower shortages, and that the federal government should finance this effort.

Congress acted by passing the Comprehensive Health Manpower Training Act of 1971, which authorized institutional support in the form of "capitation" grants. These grants were based upon established amounts per student per year, plus a bonus amount for enrollment of first-year students beyond mandated levels. As a condition for the \$2,500/medical student, schools were required to expand enrollment (the fourth time in eight years), maintain non-federal financial support and conduct at least three of nine programs developed to address national needs.

This act expired in June, 1974, leaving the 93rd Congress to enact new health manpower legislation. The Senate and House passed manpower bills, but they differed considerably in their approach to the physician maldistribution problem. Since the bills were passed late in the session of Congress, the differences could not be resolved by the time the Congress adjourned, and so the 1971 act was extended.

In this session of Congress, the House has passed a manpower bill (H.R. 5546-- the Rogers bill) that mandates more institutional support through capitation grants. However, before the Senate also agrees to such aid, it is appropriate to look back on 15 years of federal institutional support and see how effective such aid has been in guaranteeing to the American public the numbers and kinds of physicians it needs.

Federal construction and expansion funds have indeed led to an increase in the number of medical schools (28 new schools have been built since 1960) and the number of medical students (total enrollment rose from 30,288 in 1960 to 50,886 in 1973). However, the problems of geographic and specialty distribution have worsened while the supply of doctors has increased.

In 1931, one in ten American physicians practiced a surgical specialty. In 1968, one of every three doctors was in a surgical specialty. A generation ago, more than half of all practicing physicians were general practitioners. Today one in seven is in general practice. In 1943, the physician:population ratio for American inner cities was 1:500. In 1968, the ratio was 1:10,000. In 1970, the 15 counties in the United States with the highest per capita income had seven times as many physicians per capita as did the 15 counties at the bottom of the income scale, 26 times as many physician specialists and three times as many hospital beds. Urban Americans today have one physician for every 2,400 people, while in 135 counties in the U.S., not a single physician is in practice.

The failure of institutional aid to alleviate the maldistribution of physicians has been noted by many health authorities. In January, 1974, the Institute of

Medicine (IOM) of the National Academy of Sciences published a major study,

"The Cost of Education in the Health Professions." The IOM study group concluded:

"After considering whether future legislation should continue to link capitation awards to specific objectives, it is the judgement of the study group that capitation grants are of limited effectiveness in achieving quantitative objectives other than expanded enrollment...the study group believes that capitation programs can alter only slightly the geographic and specialty distribution of health professionals..."

The National Board of Medical Examiners also commented on the failure of health training institutions to address and resolve maldistribution problems. In 1973, it issued the following statement:

"Perhaps more critical than the number of physicians is the failure within the system to regulate the type and number of specialists, their geographic locations, and practice patterns. No single agency yet has accepted responsibility for determining the type and number of specialists needed. The output of graduate medical education seems more related to forces within the establishment than to the health care needs of the public. Rational consideration of numbers and types of physicians has been further obscured by the large recruitment of foreign trained medical graduates to fill residency positions."

As the NBME suggests, the institutions that train health professionals have failed to adjust their teaching methods and values to meet the needs of the American public. Medical students who are taught medicine by superspecialists, academic clinicians and basic science researchers in large, urban medical centers are unlikely to choose to practice general medicine in a rural community. Furthermore, medical schools impart more than clinical knowledge to students--they also instill values and attitudes. At most academic medical centers, the prevalent feeling is that it is more glamorous, more significant and more "medical" to treat esoteric diseases of hospitalized, acutely ill patients by using complex and sophisticated procedures than it is to care for ambulatory



patients in need of more routine health care. This attitude undermines any commitment on the part of some medical educators to training doctors for primary care.

Institutional support, then, has led to an increase in the number of doctors, but it has not addressed the problems of specialty choice and practice location. The federal government must take a different and innovative approach to supporting medical education if it is to serve the interests of consumers of health care.

APPROPRIATE FEDERAL INTERVENTION: AMSA'S HEALTH MANPOWER PROPOSAL

It is AMSA's conclusion and position that a new form of federal intervention is necessary to address critical health manpower distribution problems. AMSA believes that the following objectives should be met in any health manpower bill that Congress finally adopts:

- 1) Redistribution of adequate numbers of physicians to areas of critical need.
- 2) Production of adequate numbers of primary care practitioners with concomitant reductions in overcrowded specialties.
- 3) Fulfillment of America's medical manpower needs through the education of adequate numbers of its own citizens for medical careers.
- 4) Ultimate student responsibility for the financing of their medical education through service in underserved areas or through direct payment of true educational costs.

- 5) Equal treatment of all socioeconomic, cultural, and racial groups with regards to access to health care and access to medical education.
- 6) Appropriate incentives for the institutional reform of medical education directed at public needs in health care.
- 7) Avoidance of constitutional issues that would impede passage of the legislation or delay implementation.

The American Medical Student Association has analyzed the bills currently before Congress as well as other proposals for a national health manpower policy. It is our conclusion that the concepts incorporated in Senate Bill 991, with modifications, would be most effective in achieving the objectives outlined above and thereby meeting the health manpower needs of this nation.

In brief, AMSA proposes that:

A. Institutional support to medical schools in the form of capitation grants be discontinued.

Obviously, the discontinuation of capitation payments would result in a tuition increase. The Secretary of the Department of Health, Education and Welfare should be authorized to establish approved levels of tuition for each medical school. "Approved tuition" initially should not exceed the level of tuition and fees for the entering class of 1974 plus the actual amount of capitation support per student received by that school in 1974. This figure should be adjusted to allow for increases due to inflation. In succeeding years, the Secretary should

review and approve any requests for increased tuition levels. All such requests should be made public at the time of submission to the Secretary. Maintenance of effort by states as well as maintenance of private support should be required by law.

B. Sufficient funds for a scholarship program providing tuition plus a living allowance be authorized by Congress.

The scholarships available under this program would be similar to the Public Health and National Health Service Corps Scholarship Training Program scholarships. Every medical student wishing to take part would initially receive a yearly amount equal to the "approved tuition" for his/her school plus \$4,000 for books and living expenses. Cost-of-living adjustments for expenses would be made, if indicated, in subsequent years.

Upon completion of training (including graduate residency training to the greatest extent possible), students would repay the support they received by one of two mechanisms:

a) In return for each year of scholarship support, a student would agree to serve for six months, with a minimum service period of two years, in a physician shortage area. The student would work as a civilian member of the National Health Service Corps, as a member of the Commissioned Corps of the Public Health Service or through private practice in a designated shortage area.

b) Students unwilling to serve in shortage areas would repay in dollars twice the amount received as scholarship support plus accrued interest.



As AMSA's primary intent is to encourage young physicians to serve in shortage areas, AMSA's members and officers have debated whether the scholarship program should have any repayment provisions other than service. It is our feeling, based on the current demand for the Public Health and National Health Service Corps Scholarship Training, that the overwhelming majority of students would choose service rather than direct repayment. Therefore, it was concluded that a repayment provision would not undermine the goal of providing services to communities in need. Allowing repayment in dollars also obviates the necessity of a review board of some type to consider cases of true hardship since these individuals could repay in dollars.

Any scholarship recipient refusing to repay support in either service or dollars would be subject to loss of license. Scholarship recipients would not be required to repay their grants if they did not complete their undergraduate study.

If Congress should fail to appropriate adequate funds for the scholarship plan, a program providing federally guaranteed loans for amounts equal to the scholarships should be automatically instituted. Repayment provisions would be the same as those for the scholarship plan.

C. The criteria for designated "shortage areas" be expanded to include more of our nation's needy areas and to accommodate the increased pool of physicians willing to serve.

The definition of "physician shortage areas" should be broadened to include inner-city areas where social and economic barriers to health care exist, migrant health centers, Veterans Administration and Public Health Service hospitals and clinics, Indian Health Service facilities, state and federal prisons, state mental hospitals, free clinics, neighborhood and community health centers and other areas and institutions that lack qualified physicians.

Any group or person should be able to request that a population be designated a medically underserved area. In considering such an application the following factors should be considered:

- a) the ratio of available physicians to the population.
- b) indicators of the accessibility and availability of health services for that population.
- c) indicators of the health status of the population.
- d) indicators of the need and demand for health services of the population.

The population should not have to conform to the geographical area of any political subdivision, nor should the ability of the population to pay for health services be a factor in the designation of shortage areas.

These criteria would allow services to be provided in communities where social and economic barriers prevent access to services available to other segments of the community. They will also prevent local medical groups from blocking NHSC-type projects simply out of professional self-interest.

D. National and Regional Health Manpower Councils be established.

These councils would have the power to establish the total number of graduate (i.e., residency) positions available, the total of which should not exceed 125 percent of the number of U.S. medical graduates for that year, and to assign those positions to the various categories of specialty and subspecialty practice. These councils should also be empowered to award special priority grants to facilitate expansion or development of programs to train family physicians in regions with relative shortages of physicians. AMSA recommends that 50 percent of those completing a specialty training program be in family practice, general internal medicine, general pediatrics and general obstetrics and gynecology.

The National and Regional Health Manpower Councils should also be charged with the ongoing assessment of physician specialty distribution, the development of collaborative working relationships with the various specialty organizations and the assessment of need for financial support to graduate primary care training programs.

E. Measures be taken to decrease the current drain of physicians from other countries.

It is reasonably certain that with the recent increases in medical school enrollments, the United States can adequately meet its own physician manpower needs. Thus, the United States should take steps to halt the ethically questionable practice of encouraging foreign physicians to immigrate to the United States.

AMSA recognizes that our country's heritage is based on the right to immigrate. It also recognizes that our country has a responsibility to assist other countries, especially the developing nations, to improve their levels of medical education, medical practice and public health. AMSA recommends the end of preferential immigration status for physicians. We also recommend the establishment of educational programs for FMGs that are more consistent with their needs and with the intent of international exchange legislation.

Specifically, AMSA recommends that the admission of foreign medical graduates as exchange visitors be limited to the defined purposes and time period authorized by Department of State regulations for exchange visitor programs. Congress should reconsider those amendments to the 1970 Immigration and Naturalization Act (PL 91-225) that allow FMGs to convert temporary visas granted for educational and cultural exchange purposes to permanent immigration visas. AMSA also recommends that Congress reconsider those amendments to the 1965 Immigration Act that give priority to people with professional and technical skills.



F. Special project grants be made available to medical schools for the establishment of Area Health Education Centers and other remote site training projects.

Physicians are more likely to practice in underserved areas if they have been exposed early in their training to the rewards of such practice and if they can maintain links to training institutions. Area Health Education Centers have been successful in exposing students to medical practice away from large medical centers and in providing continuing education and back-up to practicing physicians in rural areas.

AMSA supports the development of further Area Health Education Centers or similar regional medical centers and the establishment of high quality primary care preceptorship programs for all medical students.

G. Special project grants be made available to medical schools for the sponsorship of programs designed to recruit, admit, retain, and graduate increased numbers of minority and disadvantaged students.

AMSA's definition of "recruitment" includes programs designed to help students become qualified for admission by overcoming previous educational disadvantages. AMSA also recommends low-interest subsidized loans for these students so they can enter and remain in preparatory programs.

AMSA fears that the resolve of medical schools to admit and graduate more minority students is weakening. Therefore, AMSA urges Congress to take appropriate measures to ensure that all segments of our general population are equitably represented in the medical profession.

H. Special project grants be made available to medical schools for the sponsorship of programs designed to transfer to the United States with advanced standing those American students (U.S. citizens) enrolled in foreign medical schools before July 1, 1975.

The objective of such projects should be to integrate these students into the American medical education system, thus more fully utilizing this valuable resource pool. Required remedial work should be provided by these programs.

#### COSTS

The costs of operating the health manpower system that AMSA is proposing are substantial. The proposed scholarship program would entail the greatest costs.

Following is a rough calculation of the scholarship costs based on the data from the Institute of Medicine Study. In calculating the costs, the following assumptions were made:

- 1) that 90 percent of all medical students would opt for participation in the program.
- 2) that tuition would be allowed to rise by the actual average capitation payment in 1974.
- 3) that states would be required to maintain their current levels of financial support.

According to the Institute of Medicine's Study, medical schools received \$78.5 million in tuition and fees in 1971-1972. At the 1971-1972 enrollment of 43,650, the average tuition for that academic year was \$1,804. If it is assumed that since 1972 tuition has risen by 20 percent due to inflation, the average tuition in 1975-1976 would be \$2,164. In 1972-1973, the average capitation payment was \$1,961, significantly below the average authorized capitation grant of \$2,850.

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Approved tuition for the proposed program would be in the range of \$4,125 to \$5,000, depending on the conditions specified in the final bill. AMSA's calculations of cost are based on tuition of \$5,000 that it believes is necessary to stabilize the financing of medical education.

The total cost of the scholarship program would be \$452 million, assuming an enrollment of 55,795 at its inception. The table below illustrates how this figure was derived:

| <u># of medical students</u>               | <u>90% of medical students</u> | <u>average tuition</u>                     |
|--|--------------------------------|--|
| 55,795                                     | 50,216                         | \$5,000                                    |
| <u>total payments for approved tuition</u> |                                | <u>total payments for living allowance</u> |
| \$251.1 million                            |                                | \$200.9 million                            |
| <u>total cost</u>                          |                                |  |
| \$452 million                              |                                |  |

The necessary funding for the program would be reduced as the participants complete their training and begin repaying their support through service. AMSA anticipates that most participants will choose to serve in the National Health Service Corps, which collects fees from patients and third party programs. These funds could be put into a revolving scholarship fund, thereby reducing the total appropriation necessary to operate the program.



BENEFITS

The benefits of the proposals set forth in this position paper are obvious. For the first time, America would have a national plan for utilizing health manpower resources in a manner that serves the public interest. By appropriately linking the financing of medical education to programs that meet our nation's medical needs, this system would orient the new physician to a system based on the needs of patients rather than those of providers.

It seems clear that the federal government will expand the public's economic entitlement to health care through a national health insurance program. AMSA's proposed system would guarantee that all Americans could exercise this entitlement by having access to services. The Medicare and Medicaid experience should lead us to understand that a national health insurance program that provides "equal financial access" without guaranteeing availability of needed services to all Americans is worthless.

AMSA's proposals also would provide an adequate and stable supply of funds for medical schools, which, according to Rep. Paul Rogers (D-Fla.), author of H.R. 5546, is the primary reason he supports capitation grants. They would provide equal financial access to a medical education for all socioeconomic groups and would eliminate the destructive economic struggle many medical students now have to endure.

AMSA's proposals also would ensure that U.S. reliance on foreign trained physicians would end and that those foreign physicians who come here for educational training, in fact, would get what they are seeking.

Finally, this is a proposed system that, from an administrative standpoint, appears practical and that is attractive to physicians-in-training. The major cost is the initial expenditure for the scholarship programs, which would be reduced dramatically after the program is in full operation. In the long run it would be more practical than current support methods.

The most important benefit of AMSA's proposals, however, is that individuals and communities requiring health care would receive it. This alone should be the ultimate goal of any health manpower plan and the most convincing reason for acting on our recommendations.

#### CONCLUSIONS

It is our contention that the marketplace and the present programs of institutional support are inadequate to meet our nation's health manpower needs. A strong, innovative form of federal intervention is imperative. AMSA endorses the concept of direct support to medical students, who would repay this support after training primarily through service in areas of need. Such repayment through service can allow the maximum choice of practice location and can decrease our reliance on foreign medical graduates. It also would direct health care providers to the areas of greatest need.

AMSA believes strongly that its proposals are viable, effective and would serve the public interest. Its proposals are not designed to benefit the providers of health services or the institutions that train the providers. They are meant to serve the ultimate consumer of health care and health education--the American public.

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Senator KENNEDY. Our next witness is Dr. Robert Harmon, president, Physicians National House Staff Association. We are glad to have you here.

**STATEMENT OF DR. ROBERT G. HARMON, M.D., PRESIDENT, PHYSICIANS NATIONAL HOUSE STAFF ASSOCIATION, AND ROBERT BERENSON, M.D., LEGISLATIVE COMMITTEE CHAIRMAN**

Dr. HARMON. Thank you, Senator. PNHA is pleased to be here to testify. I am Dr. Robert Harmon, currently a resident in preventive medicine, public health at Johns Hopkins. With me is Dr. Robert Berenson, who will tell you what he is doing.

Dr. BERENSON. I am currently a resident in internal medicine and primary care resident at George Washington University and for the last 2 years was a medical officer in the Office of Community Health Centers in HEW.

Senator KENNEDY. I might just say both for this panel and for the other panels and witnesses, if I could have your attention, that I hope you will take a moment as to the hearing to swing by and see your representatives and talk to them about this issue. I know some of their staffs are represented here. I think that would be very helpful to us.

Dr. HARMON. I'm going to go through our summary and elaborate on a few specific issues.

**GEOGRAPHIC MALDISTRIBUTION**

One: A serious problem exists, requiring Federal legislation to redistribute manpower resources.

Two: Although we are opposed to mandatory service for doctors, we acknowledge that voluntary, service-related scholarships may be a partial solution to geographic redistribution, but only if certain conditions are met:

(a) Participation should be truly voluntary, and not such that it forces poor or academically marginal individuals into signing up;

(b) special scholarships and loans not tied to service obligations should be available for the poor.

Three: Capitation funding with conditions should be continued for medical and osteopathic schools. Student payback of capitation should not be required.

Four: Urban underserved areas and institutions, as well as rural, should be designated for service payback.

Five: Before commencing obligatory service, participants should be allowed to finish residency training.

**SPECIALTY MALDISTRIBUTION**

One: A rational allocation system for internships and residencies, based on public need for medical services, is desirable.

Two: A Federal commission should be established, with representation by Government, the private sector—including consumers—and adequate numbers of housestaff and students, to analyze—based on its own data—the current specialty training situation. This commission should report to the Secretary of HEW who ultimately would be granted the authority to regulate if necessary.



Senator KENNEDY. You do not think on the basis of your own knowledge and understanding that that need is self-evident today? You think we need more studies on it?

Dr. HARMON. It is difficult to say right now because of the serious needs of these hospitals across the country. Granted, it would be instituted in 1980, but I think the data which has come out of the private sector may not be specific enough related to the service needs of these innercity hospitals and of these community hospitals. I think the approach that ultimate forms of practitioners, auxiliaries, is important to consider.

Basically, a certain percentage unfilled, which is about 10 percent right now, may be necessary to avoid health staff being forced into residencies that may not be particularly appropriate for their needs. There is a whole other area, and that is 50 percent primary care area, which Dr. Berenson may want to comment on.

Dr. BERENSON. Yes. I guess where we are coming from in this whole question of 50 percent, establishing a limitation on residencies now, is really the lack of precision as to what it is we are talking about. It is clear we support the concept of increasing primary care residencies, but what does that mean in real life? I am entering a track starting in March of primary care of internal medicine, and we are having a hell of a time trying to determine really what that includes.

The AMA states that an internist is a primary care physician. That, in some cases, is clearly not true. And primary care can be done by surgeons. By the same token, we feel in public hospitals that there, may be underrepresentation of primary care and certain surgical specialties. Just working in an emergency room in a city hospital on Saturday night I think demonstrates that. We are not opposed to establishing a specific figure. We think that a specific time can be established by which that figure must be established and I do not think that has been well considered at this point as to where that figure should be established.

So we support the concept, we need a fixed and limited time in which to come up with actual numbers is what we are saying.

Senator KENNEDY. Once you come up with numbers, how would you have it worked out? Do you have it done through HEW, or CCME?

Dr. HARMON. We think CCME has been reluctant to assume this role, and therefore it might do a lackless job. We favor Federal commission approach, and of course we would urge house staff be involved in that commission, and not just in the number proposed in some of the legislation but in substantial numbers.

Regarding foreign medical graduates, one, we feel a single, uniform qualifying exam for any doctor to enter a U.S. internship or residency should be in effect.

Two, the exchange visitor—J-visa—program should be restored to its original purpose of training doctors abroad for return home with useful skills.

#### LICENSURE STANDARDS

One: A single professional licensing examination should be available for all physicians, regardless of nationality.

Two: Minimal standards of licensure, as advocated in S. 989 are appropriate to insure competence.



I would like to go over some of the points we would like to make and point out that it has been said the doctors are not providing public service for the kind of Federal funding that is being delivered to medical education.

We would say that house staff spend a great deal of time in training programs, working as many as 80 to 100 hours a week for about \$2.80 an hour serving the public. I spent 3 years of training in public hospitals, Denver General, which is city, Denver VA, which is Federal, and Colorado General. All my time is spent there. Dr. Berenson did a large part of his internship at Morrisania Hospital in south Bronx, and now a substantial part of his residency at the VA Hospital here in Washington. In fact, while internships and residencies are technically training programs, over 70 percent of house staff time is spent in direct patient care. We submit that young physicians are not getting a "free ride" with nothing in return. As a result, a substantial part of our organization feels that a "doctor draft" is unfairly discriminatory.

Another approach has been proposed, that of voluntary scholarships in return for service obligations. This is viewed by some of our members, both liberal and conservative, as a form of economic conscription. The burden for service may fall directly on the poor.

If a large, fixed percentage—say 50 percent—of each incoming freshman class must be committed to accepting service-related scholarships, the program may not be as voluntary as advertised. Those students with less impressive academic credentials and more financial need may be the ones forced to sign up. A two-class system of medical education could result. Another admissions scandal, equal to the buying of med school positions with sub-rosa parental contributions of over \$50,000, might be created.

We acknowledge that service-related scholarships may be a partial solution to the problem, but this is only if they are truly voluntary and if adequate safeguards are included to allow the poor not to serve if desired. We, therefore, strongly support special Federal scholarships and loans to the economically disadvantaged without service payback obligation.

Where service-related scholarships are accepted, buyout provisions should be stringent—that is, double plus interest. Also, the Congress must be faithful in supporting scholarships and loans with adequate appropriations. We support continuation of capitation support to medical and osteopathic schools with specific conditions expected from the schools. We oppose payback of capitation funding by students. This would be an ineffective method of achieving redistribution of manpower.

#### URBAN AREA DESIGNATION

As we indicated before, we feel that there are many nonrural areas of health manpower shortage. Many already have established institutions which could be designated for service by obligated doctors. We refer specifically to Federal—Indian Health Service, Public Health Service, Veterans' Administration—State, and local public hospitals and clinics. These institutions, established to serve populations neglected by the private sector, have great difficulties recruiting and retaining physicians and should be acceptable as service areas. The uniformed services should probably also be included. We would add

that the doctor should be allowed much flexibility in choosing where his/her assignment will be.

#### NATIONAL HEALTH SERVICE CORPS

With regard to the National Health Service Corps [NHSC], we applaud the administration's statement that the NHSC is initiating demonstration projects in urban areas. Yet, the stated goal of "independence and self-sufficiency" seems unrealistic to us. In some States with relatively liberal medicaid benefits, perhaps NHSC urban sites can become self sustaining. In other States, there can be no thought of self-sustaining practices until an adequate national health insurance is established. The NHSC must be flexible enough to permit diverse practice models and permit placement in already established delivery systems, such as those listed above.

There must also be flexibility with regard to when a physician may select to do his/her service. Many may choose to complete their residency training prior to fulfilling their service obligation. The public would be better served by well-trained primary care specialists ready to settle down than by generalists with minimal postgraduate education and no desire or intention of becoming primary care doctors in the specified area.

#### SPECIALTY MALDISTRIBUTION

As stated before, we support a rational allocation system for internships and residencies based on planning needs. Unfortunately, most of the projections about absolute numbers and specialty mixes of physicians required for the U.S. population are based on measures of utilization and productivity. These data avoid the issue of quality of care and ignore differences in what physicians actually do. Thus, the AMA considers all internists to be primary care physicians, even though many clearly are not. The American Academy of Family Physicians considers family practitioners to be the only primary care physicians worthy of Federal support, although there is minimal evidence to support this.

Unfortunately, no one has considered the role that house staff play as primary care physicians. For millions of Americans, particularly in inner cities, most medical services are being provided by interns and residents. Some public health institutions, including State mental hospitals, city and county hospitals, and Veterans' Administration hospitals, are clearly understaffed at the present time. Arbitrarily limiting the numbers of residency positions without making alternative provisions for providing the services which house staff now deliver is doing a disservice to poor populations. They have neither social nor economic access to the "mainstream" delivery system which may indeed have an excess of doctors in the near future. It is clear to us that the people of the south Bronx need more primary care physicians, as well as more general surgeons, and neurologists, and gastroenterologists and gynecologists, not to mention psychiatrists and psychologists. We agree with provisions in S. 989 to promote the use of health auxiliaries to help provide services alongside house staff.

The basic point here is that it is premature to begin fixing numbers of training programs and limiting specialties, until the allocation can be made upon a rational, carefully constructed, and unbiased assessment of manpower requirements. We support the development of a commission to analyze the current situation utilizing its own data.



Within a fixed and limited period of time, the Commission would report to the Secretary of HEW who would have the authority to establish ceilings and insure proper specialty balance. Such a commission must include representation of Government, the private sector—including consumers—and adequate numbers of house staff and students, to bring unique perspectives into the issue.

#### FOREIGN MEDICAL GRADUATES

Regarding the role of foreign medical graduate, FMG, physicians in the United States, we are in basic agreement with positions stated earlier this fall by organized medicine. We deplore, however, the tendency toward blanket, arbitrary condemnation of FMG's competence. We feel this is unfair, especially in light of the substantial contribution by these doctors to our Nation's health care.

We agree with the concept of a single, uniform qualifying examination for entry by any doctor into a U.S. internship or residency. Parts I and II of the national board exams would be acceptable. We agree with the necessity of fluency tests in English for FMG's prior to appointment.

We agree with restoration of the J-visa—exchange visitor—program to its original status. We would point out that training for these doctors should be such that it is useful in the home country—not just in the United States. Trainees should be allowed to remain in the United States long enough to take specialty board exams. U.S. programs should be willing to share their house staff and faculty with institutions abroad. I have done that myself with Project Hope in Jamaica, and I have worked in India teaching and I found it to be a very enlightening experience.

There should be fair access for FMG's to university-based training programs, not just "cheap labor" oriented community hospitals. There should be adequate orientation programs for FMG's, emphasizing cultural as well as clinical factors.

Finally, we would like to comment on the provision in S. 989 which established national standards for State licensure of physicians. PNHA, in a resolution passed at its last annual national convention, called for a single licensing examination which would apply to all physicians, regardless of whether medical training occurred in the United States or foreign countries.

We feel strongly that the public must be guaranteed a minimal standard of competence and that the physicians, whether United States or foreign-trained, must be treated fairly and uniformly. Minimal national standards for licensure and relicensure should help accomplish these goals.

PNHA, therefore, supports the provision in S. 989 which established such standards. In further development and implementation of the standards, we feel that physicians, themselves, should play the primary role. PNHA would be available at any time to help in this activity.

We thank you for this opportunity to express our views.

Senator KENNEDY. Very, very good. Thank you very much. We appreciate your presentation here. Very helpful comments. We will be staying in touch with you.

Dr. HARMON. Thank you.

[The prepared statement of Dr. Harmon and Dr. Berenson follows:]



1874

HEALTH MANPOWER LEGISLATION

STATEMENT

OF THE

PHYSICIANS NATIONAL HOUSESTAFF ASSOCIATION

BY

ROBERT G. HARMON, M.D.  
PRESIDENT

AND

ROBERT BERENSON, M.D.  
LEGISLATIVE COMMITTEE CHAIRMAN

BEFORE THE

SUBCOMMITTEE ON HEALTH

OF THE

COMMITTEE ON LABOR AND PUBLIC WELFARE

UNITED STATES SENATE

October 30, 1975

SUMMARY

GEOGRAPHIC MALDISTRIBUTION

1. A serious problem exists, requiring federal legislation to redistribute manpower resources.
2. Although we are opposed to mandatory service for doctors, we acknowledge that voluntary, service-related scholarships may be a partial solution to geographic redistribution, but only if certain conditions are met:
  - a) Participation should be truly voluntary, and not such that it forces poor or academically marginal individuals into signing up
  - b) Special scholarships and loans not tied to service obligations should be available for the poor.
3. Capitation funding with conditions should be continued for medical and osteopathic schools. Student payback of capitation should not be required.
4. Urban underserved areas and institutions, as well as rural, should be designated for service payback.

5. Before commencing obligatory service, participants should be allowed to finish residency training.

#### SPECIALTY MALDISTRIBUTION

1. A rational allocation system for internships and residencies, based on public need for medical services, is desirable.

2. A federal commission should be established, with representation by government, the private sector (including consumers), and adequate numbers of housestaff and students, to analyze (based on its own data) the current specialty training situation. This commission should report to the Secretary of HEW who ultimately would be granted the authority to regulate if necessary.

#### FOREIGN MEDICAL GRADUATES

1. A single, uniform qualifying exam for any doctor to enter a U.S. internship or residency should be in effect.

2. The exchange visitor (J-visa) program should be restored to its original purpose of training doctors abroad for return home with useful skills.



LICENSURE STANDARDS

1. A single professional licensing examination should be available for all physicians, regardless of nationality.

2. Minimal standards of licensure, as advocated in S.989 are appropriate to insure competence.

### INTRODUCTION

Mr. Chairman, I am Dr. Robert Harmon, President of the Physicians National Housestaff Association, a nationwide union of interns and residents dedicated to better standards of patient care and improved working conditions in teaching hospitals. With me is Dr. Robert Berenson, PNHA's Legislative Committee Chairman.

After months of considering the various bills before Congress, reading the testimony delivered to committees, soliciting the views of our constituency, and doing a lot of just plain brainstorming, it is obvious to us that there is unfortunately no single, satisfactory solution to the health manpower legislation stalemate.

We are not supporting the status quo. We disagree with the American Medical Association which states essentially that there are no problems in access to medical care with which the private sector is not dealing. We disagree with the Administration, which feels that solutions do not require significant expenditures of public funds.

Although we don't have the ideal solution, we would like to record our support for certain principles that we feel should form the basis for legislation:

- 1) The problems of maldistribution of physicians by geography and specialty are serious, increasing in magnitude, and require attention in the form of federal legislation.

- 2) Physicians and medical schools, the same as other recipients of public funds, must be held fiscally and morally accountable.
- 3) Urban areas, like rural areas, have severe health manpower shortages and should be a prime focus for redistribution efforts.
- 4) Any form of national service should ideally not be related to the economic status of the individual serving.
- 5) A rational allocation system for internships and residencies, based on public need for medical services, is desirable.
- 6) A minimal standard of physician competence should be assured by a uniform system of licensure and relicensure.

Having stated these principles we would like to comment upon the conflicts that arise when specific aspects of manpower legislation are considered.

#### GEOGRAPHIC MALDISTRIBUTION

##### Obligatory Service

At our recent National Assembly meeting, PNHA delegates simply could not



resolve the dilemma of better geographic distribution of doctors. On one hand, we recognize that despite voluntary efforts by the private sector and all levels of government, the maldistribution problem appears to be increasing in magnitude, AMA testimony notwithstanding. We realize that individual physicians may have to assume obligations for service simply because purely voluntary approaches have failed.

On the other hand, we recognize the inherent inequity in this solution. There is currently no domestic draft. The tying of a medical education to a mandatory service obligation is a form of draft and, if not actually unconstitutional, seems to be unfair and bad public policy. The argument is often raised that medical students are heavily subsidized by the Federal government and therefore bear an obligation that other professional students, who also anticipate future financial rewards, do not.

We would like to point out that most physicians currently provide a significant public service which more than compensates for the use of public funds for their education. Most housestaff spend anywhere from three to six years, working as many as 80 to 100 hours a week, earning about \$2.80 an hour, serving the public. I spent all three years of my internal medicine training at Denver General, Colorado General, and Denver VA Hospitals -- all of which are public institutions. Dr. Berenson did a large part of his internship at Morrisania Hospital in South Bronx, and now a substantial part of his residency at the VA Hospital here in Washington. In fact, while internships and residencies are technically training programs, over 70% of

housestaff time is spent in direct patient care. We submit that young physicians are not getting a "free ride" with nothing in return. As a result, a substantial part of our organization feels that a "doctor draft" is unfairly discriminatory.

Another approach has been proposed, that of voluntary scholarships in return for service obligations. This is viewed by some of our members, both liberal and conservative, as a form of economic conscription. The burden for service may fall directly on the poor.

If a large, fixed percentage (say 50%) of each incoming freshman class must be committed to accepting service-related scholarships, the program may not be as voluntary as advertised. Those students with less impressive academic credentials and more financial need may be the ones forced to sign up. A two-class system of medical education could result. Another admissions scandal, equal to the buying of med school positions with sub-rosa parental contributions of over \$50,000, might be created.

We acknowledge that service-related scholarships may be a partial solution to the problem, but this is only if they are truly voluntary and if adequate safeguards are included to allow the poor not to serve if desired. We, therefore, strongly support special Federal scholarships and loans to the economically disadvantaged without service payback obligation.

Where service-related scholarships are accepted, buyout provisions should be stringent (i.e., double plus interest). Also, the Congress must be faithful in supporting scholarships and loans with adequate appropriations. We support continuation of capitation support to medical and osteopathic schools with specific conditions expected from the schools. We oppose payback of capitation funding by students. This would be an ineffective method of achieving redistribution of manpower.

#### Urban Area Designation

As we indicated before, we feel that there are many non-rural areas of health manpower shortage. Many already have established institutions which could be designated for service by obligated doctors. We refer specifically to federal (Indian Health Service, Public Health Service, Veterans Administration), state, and local public hospitals and clinics. These institutions, established to serve populations neglected by the private sector, have great difficulties recruiting and retaining physicians and should be acceptable as service areas. The Uniformed Services should probably also be included. We would add that the doctor should be allowed much flexibility in choosing where his/her assignment will be.

#### National Health Service Corps

With regard to the National Health Service Corps (NHSC), we applaud the



Administration's statement that the NHSC is initiating demonstration projects in urban areas. Yet, the stated goal of "independence and self-sufficiency" seems unrealistic to us. In some states with relatively liberal Medicaid benefits, perhaps NHSC urban sites can become self-sustaining. In other states, there can be no thought of self-sustaining practices until an adequate national health insurance is established. The NHSC must be flexible enough to permit diverse practice models and permit placement in already established delivery systems, such as those listed above.

There must also be flexibility with regard to when a physician may select to do his/her service. Many may choose to complete their residency training prior to fulfilling their service obligation. The public would be better served by well-trained primary care specialists ready to settle down than by generalists with minimal post-graduate education and no desire or intention of becoming primary care doctors in the specified area.

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of quality of care and ignore differences in what physicians actually do. Thus, the AMA considers all internists to be primary care physicians, even though many clearly are not. The American Academy of Family Physicians considers family practitioners to be the only primary care physicians worthy of federal support, although there is minimal evidence to support this.

Unfortunately, no one has considered the role that housestaff play as primary care physicians. For millions of Americans, particularly in inner cities, most medical services are being provided by interns and residents. Some public health institutions, including state mental hospitals, city and county hospitals, and Veterans Administration hospitals, are clearly understaffed at the present time. Arbitrarily limiting the numbers of residency positions without making alternative provisions for providing the services which housestaff now deliver is doing a disservice to poor populations. They have neither social nor economic access to the "mainstream" delivery system which may indeed have an excess of doctors in the near future. It is clear to us that the people of the South Bronx need more primary care physicians, as well as more general surgeons, and neurologists, and gastroenterologists and gynecologists, not to mention psychiatrists and psychologists. We agree with provisions in S.989 to promote the use of health auxiliaries to help provide services alongside housestaff.

The basic point here is that it is premature to begin fixing numbers of training programs and limiting specialties, until the allocation can be made upon a rational,

carefully constructed, and unbiased assessment of manpower requirements. We support the development of a commission to analyze the current situation utilizing its own data. Within a fixed and limited period of time, the Commission would report to the Secretary of HEW who would have the authority to establish ceilings and insure proper specialty balance. Such a commission must include representation of government, the private sector (including consumers), and adequate numbers of house-staff and students, to bring unique perspectives into the issue.

#### FOREIGN MEDICAL GRADUATES

Regarding the role of foreign medical graduate (FMG) physicians in the US, we are in basic agreement with positions stated earlier this fall by organized medicine. We deplore, however, the tendency toward blanket, arbitrary condemnation of FMGs' competence. We feel this is unfair, especially in light of the substantial contribution by these doctors to our nation's health care.

We agree with the concept of a single, uniform qualifying examination for entry by any doctor into a US internship or residency. Parts I and II of the National Board Exams would be acceptable. We agree with the necessity of fluency tests in English for FMG's prior to appointment.

We agree with restoration of the J-visa (exchange visitor) program to its original status. We would point out that training for these doctors should be such



that it is useful in the home country (not just in the U.S.). Trainees should be allowed to remain in the US long enough to take specialty board exams. U.S. programs should be willing to share their housestaff and faculty with institutions abroad.

There should be fair access for FMG's to university-based training programs, not just "cheap labor" oriented community hospitals. There should be adequate orientation programs for FMG's, emphasizing cultural as well as clinical factors.

#### LICENSURE STANDARDS

Finally, we would like to comment on the provision in S.989 which established national standards for state licensure of physicians. PNHA, in a resolution passed at its last annual national convention, called for a single licensing examination which would apply to all physicians, regardless of whether medical training occurred in the United States or foreign countries.

We feel strongly that the public must be guaranteed a minimal standard of competence and that the physicians, whether U.S. or foreign-trained, must be treated fairly and uniformly. Minimal national standards for licensure and relicensure should help accomplish these goals.

PNHA, therefore, supports the provision in S.989 which established such standards. In further development and implementation of the standards, we feel that physicians, themselves, should play the primary role. PNHA would be available at any time to help in this activity.

We thank you for this opportunity to express our views.

Senator KENNEDY. The last witness is Dr. William Grove, executive dean, University of Illinois College of Medicine.

**STATEMENT OF WILLIAM J. GROVE, M.D., EXECUTIVE DEAN, UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE, ACCOMPANIED BY JOSEPH L. PREISSIG, ASSOCIATE DEAN**

Dr. GROVE. I am accompanied by Mr. Preissig, associate dean. I believe I can complete my statement in 6 or 7 minutes, hopefully. Senator KENNEDY. That is fine.

Dr. GROVE. We appreciate your invitation to testify before the Senate health subcommittee. I believe the committee's invitation stems from the fact that the University of Illinois is representative of institutions having relatively large enrollments of medical students as their distinguishing characteristic. We believe most medical educators would identify our institution among those which focus primarily on increasing the Nation's supply of physicians, and on modifying geographic and specialty distribution.

I have several comments on legislation which has been proposed. First, however, I would like to call the committee's attention to the plight of medical schools which have addressed themselves to the manpower goals enunciated by this committee, the Senate, the Congress, the Department of Health, Education, and Welfare, and which are responding vigorously to the Nation's demand for more primary care physicians.

By combining State, local, and institutional resources with Federal resources made available through legislation enacted by this committee, these institutions have been able to increase markedly their enrollments and graduation of physicians. For example, since the initial enactment of Federal manpower legislation in 1965, the University of Illinois has increased its enrollment from 745 to 1,265, and its graduates from 185 to 275. Similar increases have occurred at other universities which focus primarily on medical education such as Indiana, Michigan, Ohio State, Jefferson, SUNY-Downstate, Wayne State, Georgetown, and Texas-Galveston. The physician graduates of these medical schools are delivering patient care in every State in the Nation and, I might add, these graduates have a significantly high representation in the primary care specialties in underserved areas.

For those institutions that have responded to your charge in this way it is particularly alarming that most manpower proposals now under discussion project reductions in support for the still pressing need of increasing the supply of physicians. As we review the legislation now being considered, it appears likely to us that Federal support to these schools will be less in fiscal year 1977 than it is in fiscal year 1976.

At the same time, the opportunities for our faculty to obtain support for other federally supported health service and biomedical research activities has increased markedly, and if the appropriation enacted by the Senate last month is an indicator, the opportunities for nonmedical education activities in the Nation's medical schools will be substantially augmented.

I am sure that you must recognize that a Federal policy which decreases funds available for institutional support of medical education



while simultaneously increasing funds for individual faculty member medical school research activities will create intense competition for faculty time and effort in the institutions which are concentrating their primary attention on meeting the Nation's need for physicians of the proper type, in the proper places, and in proper numbers.

We strongly urge that the Federal Government balance its exhortations to medical schools with its appropriations. This is not intended as a criticism of any health program enacted by the Congress. Indeed, when Federal programs are examined individually we share what seems to be the prevailing view, that most programs of medical research and health care are underfunded. What we are saying, as emphatically as we possibly can, is that if programs supporting undergraduate medical education are decreased while other programs involving medical school faculty are sharply increased, it should not be surprising if medical school faculties are guided in their work by the Federal budget rather than by the words of public officials.

To avoid destructive comparisons, our statement purposely omits specific budget data. However, one illustration will indicate the magnitude of the problem which we ask the committee to consider in developing its manpower proposals for the Senate. The Senate passed a 1976 Appropriation Act for DHEW providing an increase of about \$500 million over fiscal year 1975 for health programs, excluding medicare. None of this increase relates to direct support of undergraduate medical education, yet a large portion of this increase—perhaps hundreds of millions—will flow to medical schools. We endorse these increases and, in fact, could point out a number of appropriations which seem totally inadequate. Our plea is that this committee's legislative proposal authorize funds for training physicians which are at least proportionate to the increases allowed in health services and biomedical research. If instead, funds for physician education are decreased while programs requiring physician services are increased, further distortion is inevitable.

Specifically, we recommend inclusion of language, in any bill approved by the committee, to insure that funding for programs aimed at improving the supply and distribution of primary care physicians does not decline relative to other federally supported health programs. We would be happy to work with the committee staff to develop language aimed at achieving this goal.

We will try to answer questions concerning our statement if you wish us to do so. Thank you again for giving us this opportunity to present a point of view relating to those schools which are focusing their primary effort toward the goals of this committee as we understand them.

Now, for some specific comments on the proposed legislation. I have already indicated that we support increasing the number of graduates, believing that the number of foreign medical graduates should be decreased. We would support the proposals for regulating the number of foreign medical graduates.

We support increasing the National Health Service Corps, however, I doubt that we can reach the 50-percent level in the timetable suggested.

I believe that 50 percent of residencies should be in primary care, and I mean only three—pediatrics, internal medicine, and family medicine—I do not include psychiatry or obstetrics in that group.

I believe that the total number of residencies should be limited to 110 percent of medical school graduates and I would prefer that the control of this be through HEW with some private input through an advisory council of some kind.

I support the idea of a special program for disadvantaged students. I also believe there should be a program, at least on a pilot basis, for some basic standards for licensure and relicensure.

I believe that we should continue the current special project grants as has been proposed.

Finally, I believe that there should be continuation of a facilities construction program, particularly for primary care facilities, if primary care facility is defined as an ambulatory kind of facility.

Senator, I appreciate this opportunity to present a point of view relating to those schools which are focusing their primary effort toward the goals of this committee, as we understand them.

Senator KENNEDY. I think this is very important and one that this committee has been concerned about and that is obviously the impact of research dollars on medical schools and all its implications in terms of training.

We have, as you know, developed a panel now which is looking at NIH, with this as one of their primary charges to try to give us some guidance and advice on this particular issue.

I think it is terribly important, and we ought to understand that whole mechanism better.

I think having sensitized this particular issue and your testimony is very valuable and worthwhile.

Dr. Murphy is head of it, and it is made up of some distinguished medical practitioners and academicians. They will be making their recommendations before May of next year.

Thank you very much for taking your time to make these comments.

Dr. GROVE. Thank you.

Senator KENNEDY. The subcommittee stands in recess.

[Whereupon, at 1:30 p.m., the subcommittee was recessed to reconvene Friday, October 31, 1975, at 10 a.m.]



## HEALTH MANPOWER LEGISLATION, 1975

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### Views of Academic Medicine on Health Manpower

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FRIDAY, OCTOBER 31, 1975

U.S. SENATE,  
SUBCOMMITTEE ON HEALTH OF THE  
COMMITTEE ON LABOR AND PUBLIC WELFARE,  
*Washington, D.C.*

The subcommittee met at 10:10 a.m., in room 4232, Dirksen Senate Office Building, Senate Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senator Kennedy.

Staff present: LeRoy G. Goldman, professional staff member, and Jay B. Cutler, minority counsel.

Senator KENNEDY. The subcommittee will come to order.

We continue our witnesses on the health manpower program, which includes the dean of the University of Hawaii School of Medicine, the chancellor for Department of Higher Education, State of New Jersey, and the National Medical Association. We look forward to the testimony that we will receive. We will proceed with the witnesses.

The first witness is Dr. Terence Rogers. Dr. Rogers is the distinguished dean from the Hawaii School of Medicine.

You have been extremely helpful to this committee in the past and we appreciate very much your presence here this morning.

#### STATEMENT OF DR. TERENCE A. ROGERS, PH. D., DEAN, THE JOHN A. BURNS SCHOOL OF MEDICINE, UNIVERSITY OF HAWAII

Dr. ROGERS. Thank you, Mr. Chairman. It is an honor to be here. I have prepared written testimony which has been submitted. With your permission, I will just highlight this.

The John A. Burns School of Medicine at the University of Hawaii is a new school, recently converted from a 2-year school. And just this year graduated its first 4-year class, 62 physicians.

We are a product of the Health Manpower Training Act of 1971. Typically, we have maximized the utilization of existing resources. We do not have a university hospital. Our teaching is all conducted in community hospitals.



About half the doctors in the State are involved in the teaching, and our students are trained not only in the hospitals but in remote sites, in rural Hawaii and even in the far out area of Micronesia, follows a completely humanistic approach. And our complete emphasis is on primary care.

The educational objective is to train everybody as a primary-care physician, regardless of what subsequent career they choose. One of the main points I would like to make is that the Hawaii School of Medicine is typical of the relatively small population schools with a low tax base, highly attentive legislators, and small fiscal resilience.

We have a population of slightly more than 800,000, and the availability of capitation and conversion grants were absolutely key factors in the decision of our legislature to go ahead with such a major venture in a small State.

I would like to emphasize that it is my personal opinion that questions about the control of enrollment in medical schools should be part of a national or, at the very least, regional planning effort, and that this should be conducted at the broadest sense across the whole spectrum of the health care professions and not just with respect to physicians.

I suggest that this is just plain common sense.

It does bring me to the question of capitation, however. Speaking for the interests of my own school, we would prefer to see the maintenance of the capitation system certainly at at least the current figure of about \$1,500 per student, because this is already a key element in what our State regards as the State budget.

We are aware from the history of the capitation program that qualification for this may be tied into increases in enrollment. We would plead for flexibility here because our school, as have many others, has increased enrollment to the seam-splitting stage.

We began with a class of 27 students. We now have 66.

Parenthetically, I note nearly all the particularly progressive and innovative things that we have been able to do have been made possible by the special projects grant program, and we would urge the maintenance of this program as providing the opportunity for innovation and enterprise across the whole innerface with society.

I would like to emphasize a plea for flexibility. Whatever legislation is eventually adopted, it is my considered view that eligibility for capitation and whatever should allow for a history of performance, a track record, and arbitrary base year.

Moving on to another point, Mr. Chairman, I believe that the rectification of the absolute and relative maldistribution of physicians is a national problem of the highest priority for medical educators. This is the origin of our school's policy for concentrating on primary care to improve the quality of care in Hawaii, and the Pacific.

Even in metropolitan Honolulu, the situation is very little different from the rest of America. There is a shortage of primary care physicians, although no shortage of physicians per se.

I should mention perhaps, because I forget it myself sometimes, that our medical school in Hawaii is about as far from Washington as is the Middle East, and in Hawaii we sometimes feel we get less attention than the Middle East.

The selection criteria of our admissions committee, the emphasis on required primary care and emergency room clerkships, required preceptorships, and the general tone and philosophy of our school are all pointed at this goal. And we think this is working because two-thirds of our first class elected residency training in primary care fields.

So, from this experience, I would say we, as a single school, would have no difficulty meeting the legal requirement for some proportion of the admitted class to enter primary care or in underserved areas.

Senator KENNEDY. Is that 50 percent?

Can you live with 50 percent?

Dr. ROGERS. Two-thirds of our class did so elect, so 50 percent would be fairly safe.

My own personal bias would be 100 percent of all young doctors, unless they were under very special circumstances, should experience some kind of National Health Service Corps challenge or similar experience regardless of their need or lack of a need for financial aid.

I come to this viewpoint in part from my positive experience with former Peace Corps volunteers in medical school and nursing school.

Just briefly I will touch on our minority programs in Hawaii of which we are proud.

The principal minority in our medical school is Caucasian, which makes us unusual. We have emphasized the lack of opportunity for native Hawaiians and students in Micronesia, that is the Trust Territory, Pacific Island, and American Samoa.

An unusual element of our minority program is a year of remedial premedical training, that is before being admitted to medical school, the good candidates or subjects are subjected to a year of remedial work, and their admission to medical school is contingent, to a large extent, on their performance in that remedial year. That saves filling up the entering class of the medical school per se with the people who are perhaps not the strongest candidates.

The second half of the minority program is the students with less than the usual competitive background are allowed to decelerate the first 2 years of their training over 3 years. This double-barreled approach has been very handsomely supported by the Federal Government and has worked extremely well. Ten of the 66 places in each entering class are reserved for these minority students, and of the 62 students we graduated in our first class, 9 were from the original 10 admitted 5 years previously. Six of these were of Hawaiian descent, and in that one class we thereby doubled the number of doctors of Hawaiian descent practicing in Hawaii.

I think all medical schools should have programs in family practice, and we will be comfortable with a national health policy that capitation grants, contingent upon existence of identifiable family practice unit.

One other item, Mr. Chairman, that I believe merits consideration by this committee, and I do not come here simply as a medical school dean but as a representative of the health professional deans at our school, and we would like to plead for the inclusion of schools of public health on the capitation section of this bill.



The close collaboration between the schools of medicine and public health at our university have made possible some extremely rewarding community-oriented health manpower programs directed, as I noted, toward solving the problems of tomorrow rather than refining yesterday's solution.

I would like to close with a bit of special pleading.

A key project of our school has been to provide physicians' assistants in Micronesia, the Trust Territory of the Pacific Island. These MEDEX we have trained are, in turn, training health assistants, people with low level of formal education and no capability in the English language, which means they are inaccessible to us.

So the MEDEX we have trained are, in turn, training the next echelon, and this is one of the strongest hopes for a primary health care for the 125,000 people scattered in an area as large as that of the United States, because we are an island State, and only 10 hours flying time from Micronesia—that is close by Pacific standards—we are acutely aware of our obligation to Micronesia.

As you know very well, when the United States assumed strategic trusteeship in 1947, it also assumed human responsibility for these people which have not been kept in any spectacular fashion.

In the health manpower training program, we have engaged in Micronesia and the recruitment of Micronesians to our minority program, we have found the HEW offices to be extremely flexible and helpful but, nevertheless under the existing legislation, Micronesia essentially is competing with the regular States for health manpower training funds—I specify training funds—not for health funds. There is an element of injustice in this in that they do not have a substratum of a sophisticated advocacy—first off, they have no medical school—so we would most respectfully ask on behalf of Micronesia that the committee seriously consider earmarking some funds for this matter. The funds, of course, would go to the Micronesian Government.

What they did with them would be their business. We would hope that we could help.

Mr. Chairman, thank you.

Senator KENNEDY. How much for Micronesia? What sort of figures are you talking about?

Dr. ROGERS. About half a million a year.

Senator KENNEDY. That seems to be a pretty good bargain, I would think, for those kinds of efforts on your part.

Let me ask, could you tell me just a little bit about the profile of your medical students? Where do they come from? What is their background, and what sort of financial support, security do they have generally?

Dr. ROGERS. First, we are truly multiracial.

To be slightly factious, the Chinese student seems to be the most prosperous, but that is not always the case. But most of our students are not affluent, and a lot of our effort goes into seeking student assistance.

A small problem is that Micronesian and Samoan students, for example, are American Nationals, but are not American citizens, and therefore they are not eligible for the current scholarships and loans.



Senator KENNEDY. Can you tell us a little bit about the need for limiting the number of residencies, and putting them in primary care? You support that, do you not?

Dr. ROGERS. Yes, indeed. The proliferation residencies of course will be controlled in part by the need for them to be all affiliated with schools of medicine, but I would see this as part of a national health planning policy.

Senator KENNEDY. Who should do that, CCME, or should it be HEW?

Dr. ROGERS. I think with the new legislation regarding health resources planning that it should be done in HEW with appropriately polite representation of the professional bodies.

Senator KENNEDY. What is your view of the FMG's? Should we put a stronger restriction on their practice here in the United States? If so, what should be the criteria?

Dr. ROGERS. I think the restriction will come about by increasing the opportunities, and therefore the numbers of American graduates.

Senator KENNEDY. You think we ought to strengthen for formal requirements that are necessary for them to practice here in the United States. Should there be stronger tests? Should they have to pass part I of the National Boards, for example? Should they be required to speak English?

Dr. ROGERS. Yes. Insofar as ECFMG goes it does seem to be letting by people with limited capability of communicating with patients. They should be more rigidly required to speak English.

One extremely vigorous way for them to do this would be to make it necessary for them to pass the National Board's part 1 and part 2. I would be in favor of that.

Senator KENNEDY. Do you have any ideas about how medical students could help themselves to finance their medical education?

Dr. ROGERS. A view which I put forward as a purely personal view is that I believe freshman and sophomore medical students, in particular, could work part of their annual rotation as orderlies, or other humble jobs in hospitals. The pay they earn going toward their tuition, or in our State would take the place of their tuition, and this helps them earn some money.

But most importantly, from the ideological point of view, it gives them a real feeling of their place in the human race and in the health professions and the sensitivity for the roles of other people who are not doctors in the system.

Senator KENNEDY. Have you tried this at all?

Dr. ROGERS. I bounced it off some hospital administrators who were all for it until they found the idea included paying the medical students. We will give it a whirl.

Senator KENNEDY. OK. Thank you very much. We appreciate your testimony. You made a long trip to come here, but we have worked with you in the past on a number of these matters.

We want to thank you very much.

Dr. ROGERS. Thank you.

[The prepared statement of Dr. Rogers follows:]

STATEMENT OF TERENCE A. ROGERS, PH.D., DEAN, JOHN A. BURNS SCHOOL  
OF MEDICINE, UNIVERSITY OF HAWAII

1975 HEALTH MANPOWER BILL

Honorable members of this committee, I am happy to appear before you today as the chief executive officer of one of our nation's newest schools of medicine. And, without intending invidious comparison, I can say that the John A. Burns School of Medicine of the University of Hawaii is very much in tune with the times. We began in 1967 as a two-year school, expanded to a four-year school in 1973 and graduated our first class of 62 physicians just this past May. We are a truly multiracial school -- about half of our students are of oriental ancestry, one third caucasian, and the remainder widely representative of other ethnic groups of the Pacific and U.S. Mainland.

We do not have a university hospital; our clinical teaching is conducted in community hospitals actively involving half the doctors in the state in teaching. Our students have preceptorship experiences in the inner city, the quiet rural islands of Hawaii and even in the remote atolls of Micronesia. Ours is a humanistic school. Our faculty can take some credit for this, but the pervasive quality of our Island students is the principal determinant. We do not need to teach our students compassion; they teach us.

Our school and its mission can best be summarized by quoting from our catalog:

"The major emphasis of the John A. Burns School of Medicine is to train students to the highest level of competence as primary care physicians with the goal of improving health care in Hawaii and the Pacific area."

2.

We feel that this basic training is the best, regardless of the subsequent career choice of the young doctor.

The improvement of health care, it goes without saying, means to a large degree the provision of care in those areas of our state and the American Pacific where heretofore there has been little or highly limited access to primary care. But I will come to this more fully in a moment.

As preliminary to the main points I would like to make, it is necessary for me to emphasize that Hawaii is a small state with a population of slightly more than 800,000. This means a relatively small tax base -- which in turn means an acutely attentive legislature when it comes to how those tax revenues are spent. As the newest major venture of our State government, the medical school budget receives more than ordinary inspection at each biennial budget session of the legislature.

Starting new and all within a short span of years and also under close scrutiny of conscientious legislators, we have understandably planned our school and its programs with proper attention to the resources and demands of Hawaii and the Pacific Islands. I think this would have been our approach in any case but I do acknowledge that we received most definite -- and unmistakable -- encouragement from our legislature to do things right. We are fortunate that the leadership in our state has shared our view that high quality health care is a basic right of all Americans.

Hence, I would like to emphasize that questions such as control of enrollment in medical schools should be a part of national -- or at the very least, regional -- health planning. Such planning should be conducted in the broadest sense, across the entire health professions spectrum and not just with respect to the training of physicians.



3.

This will be recognized for what it is: nothing for which profundity can be claimed, but plain, ordinary common sense. It brings me, however, to the important matter of federal capitation grants to medical schools. Speaking for the interests of my own school and state, and in consideration of our limited resources measured against the goals we seek to reach, I would prefer to see the capitation grant remain at least its present figure of approximately \$1,500 per student.

We are aware, from the history of the capitation program, of the possibility of tying the capitation grant to an increase in enrollment. There may be cases in which such a linkage is justified; however, on this point I would plead with you strongly for flexibility. The medical school at the University of Hawaii has gone from an entering class of 27 students to an entering class of 66 students in seven years. We are without question at the outer limit of our state's resources available for medical education. We have indeed responded to the intent of the Congress in the Health Manpower Training Act of 1971. Equally important, any reduction in the capitation grant would make it financially more difficult than it already is for us to maintain our program effectively.

Most of what I regard as the most progressive and innovative aspects of our school have been made possible by the Special Projects Grants program. This program really permits a small school with limited fiscal resilience to be enterprising across the whole interface with society.

I would submit, further, that there is a matter of equity involved. We have expanded our enrollment to the seam-splitting stage, we emphasize

4.

the training of primary care physicians and we seek to expand the availability of such care not only in our state but also in the islands of the Trust Territory of the Pacific. In these islands, which are governed by our country under a U.N. trusteeship, our medical school has for several years been training physicians assistants to meet the basic health needs of a widely scattered population to which the U.S. has a major moral obligation. M.D. candidates are trained in Honolulu; physicians assistants are trained in Micronesia by our faculty and Micronesian medical officers.

My plea, as I said, is for flexibility. Whatever legislation is eventually adopted, it should, in my considered view, allow for a history of performance such as that exhibited by the medical school in Hawaii. I would not regard an arbitrary "base year" as a usefully flexible device.

I believe that rectification of the absolute and relative maldistribution of physicians is a national problem of the highest priority for medical educators.

As I have said, the strong interest of our school is in the production of primary care physicians to remedy the imbalance of specialization within the profession, and the dispersion of those physicians to rural areas of Hawaii and the Pacific to remedy a geographical imbalance. Even metropolitan Honolulu on the Island of Oahu is no different from the rest of the U.S. in having a shortage of primary care physicians.

5.

The selection criteria used by our admissions committee, the emphasis on required primary care and emergency room clerkships, required preceptorships and the general tone and philosophy of our school are all pointed at this goal. It is, of course, too early to show how successful we will be in the long run, but we were gratified when two-thirds of our first graduating class elected residency training in the primary care fields I have enumerated.

From this experience, I have no reluctance in saying that if new health manpower legislation were to require a school to obtain, from some entering students, a prior agreement to take up primary care and to serve a stated period in underserved areas, our school, at least, would have no difficulty adjusting to the requirement. Our experience to date shows that a medical school can achieve these goals without a firm legal requirement, provided its faculty and administration subscribe to the proper philosophy. The same philosophy as ours, I am sure, lies at the root of proposals for expanded recruitment to the National Health Service Corps. My own personal bias is strongly towards a system whereby all young physicians would experience this or a comparable challenge, regardless of their need, or lack of need, for financial aid in training. I come to this viewpoint, in part, from my positive experiences of former Peace Corps Volunteers as medical or nursing students.

Another feature of Hawaii's medical school which relates, I am sure, to some of the concerns of this committee, is our special program to extend opportunities for medical education to previously deprived elements of our island population.



6.

Our approach to this problem has been two-fold. In our Imi Ho'ola program we seek members of our minorities who may have completed college and are interested in medicine but who need remedial work in their premedical training. They are admitted to the university -- not to the medical school -- but under our auspices for a remedial year which is designed to make them highly competitive candidates for admission to the medical school. This is an unusual and possibly unique approach to special opportunities for minority students.

The second part of this program is a decelerated system under which less well prepared students are given three years in which to complete the work which better prepared students ordinarily complete in the first two years of medical school. I emphasize there is no lowering of standards. This double-barreled approach -- which has been handsomely supported by the Federal government -- has worked well. Ten of each year's 66 entering students are selected to be members of the decelerated minority program. Nine of the 10 special program students who entered our school five years ago were among the 62 students we just graduated in May. Further, six of those graduating physicians were of Hawaiian ancestry. That may seem small but it is highly significant when you consider that 14 per cent of our population is of Hawaiian descent yet less than one per cent of the physicians are of Hawaiian blood.

I mentioned that we consider Family Practice as one of the primary care specialties. Under a grant from the Department of Health, Education and Welfare we are well underway with planning a Family Practice Residency in cooperation with the Kaiser Foundation which, as you know, operates a pre-paid health care and maintenance plan, primarily on the West Coast and in Hawaii.

I think medical schools should have programs in Family Practice and could be comfortable with a national health policy that capitation grants be conditional on the existence of an identifiable educational unit in Family Medicine.

7.

There is one other item, Mr. Chairman, that I believe merits careful consideration by this committee and that is the issue of inclusion of Schools of Public Health under the capitation section of this bill.

I have noted above that consideration of increases in enrollements for medical schools should be dictated by the true needs of the health care system as objectively determined by a rational health planning process which considers all of the many factors influencing the delivery of health care. In a like fashion, it seems logical to consider in a bill so important to our health care process as this -- those health manpower training institutions which complement and supplement the efforts of our medical and dental schools. I can speak for my own personal assessment of the value of the close collaboration between the Schools of Medicine and Public Health at the University of Hawaii and I speak for my colleague -- the Dean of our School of Public Health. The combined effort of our two schools has been a major factor in the molding of community oriented health manpower programs directed toward solving the problems of tomorrow rather than refining yesterdays solutions.

I would like to close, if I may, with an appeal. A key project of our school is to provide physicians assistant or MEDEX training to the inhabitants of Micronesia -- the Trust Territory of the Pacific Islands. These MEDEX, and health assistants in turn trained by them, are bringing primary health care to a population of 125,000 scattered on islands covering an area larger than the continental United States.

8.

Because we are an Island State, and relatively close to Micronesia, we in Hawaii are perhaps more actually aware of America's obligation to the Micronesians, many of whose islands and homes were devastated during World War II and the aftermath of atmospheric testing of nuclear weapons.

When the U.S. assumed a strategic trusteeship in 1947, it assumed also an obligation to provide a better life which only in recent years has it really begun to honor in any significant way. We need to continue our health manpower training programs in Micronesia and thus far we have been highly gratified by the support of the Department of Health, Education and Welfare and the positive attitude of the federal officers. However, in its quest for health manpower training funds, Micronesia is essentially "competing" on an equal footing with the 50 states. There is to me an element of injustice in this, considering Micronesia's relatively under-developed substratum of sophisticated advocacy in this context -- for example, no medical school.

Therefore, my appeal is this: I would ask this committee to seriously consider specific earmarking of health manpower training funds for Micronesia so that our Micronesian colleagues can develop plans to carry them through the balance of this century with the health care they deserve. We, at the John A. Burns School of Medicine stand ready to help but the funding (and therefore, the choice of help) should be for Micronesia.



Senator KENNEDY. Our next witness is Ralph Dungan, chancellor for the Department of Higher Education, State of New Jersey.

You have been a long-time friend, served President Kennedy's administration, and your achievements and accomplishments in higher education are well noted. We are delighted to have you here and look forward to your testimony.

Senator Williams wanted to be here to introduce you personally, but I will extend his good wishes to you.

**STATEMENT OF RALPH A. DUNGAN, CHANCELLOR FOR DEPARTMENT OF HIGHER EDUCATION, STATE OF NEW JERSEY**

Mr. DUNGAN. I thank the Senator very much.

I regret very much that I do not have a written statement, but I will certainly provide that to you subsequently, and to other members of the subcommittee.

First of all, for the record, let me indicate that I am what is known as higher education coordinator, of whom there are about 50 around the country. In general our responsibilities run the gamut in coordinating higher education institutions, particularly those that are publicly supported.

I appear this morning speaking only on my own behalf, although much of what I shall say reflects the viewpoint of my colleagues in some of the major States who have as we do in New Jersey responsibility for oversight of medical and other health professions education.

In New Jersey we have a medical school which is a free-standing institution, consisting actually of two medical schools, one located in the city of Newark, and the other one on the campus of Rutgers University in New Brunswick. There are also two community mental health centers, a dental school, a school of allied health and a school of biomedical sciences.

This is a large complex and it is fully publicly supported. There are no private medical schools in New Jersey.

I would like, first of all, Senator—

Senator KENNEDY. Could you hold just for one moment, please?

[Short pause.]

Senator KENNEDY. Proceed.

Mr. DUNGAN. I was about to state a number of principles that I think are fairly important, at least from my viewpoint, that should undergird any new legislation in this field.

First of all, I favor along with many others who appeared before you the desire that our health manpower legislation should induce and contribute to an enhancement of the quality and availability of medical care to all citizens.

That sounds self evident, but I am not sure that health education programs have necessarily done that in the past, nor has Federal policy in all cases contributed to this end.

The bill, in my opinion, should induce an emphasis on medical education and training which places the highest priority or emphasis on the delivery of service and the use of existing therapies—emphasis—and I underscore that term “emphasis,” rather than emphasis on the esoteric, the unusual, and the complicated which seems to me characterizes current medical education.

I want to be very clear on this one, Senator. I am not one who favors regression in the advancement of medical science. Indeed I think the American medical education research establishment takes a place second to none in the world in the advancement of medical science.

I am simply saying that I believe the emphasis ought now in this day be more on the delivery of service, and the use of existing therapy, rather than on the other side.

Senator KENNEDY. You are talking about primary care here, primarily?

Mr. DUNGAN. Primary care emphasis by all means. But, there are some other aspects of the financial and administrative relationships between the schools and the Federal Government that are of great concern to people like myself and others at the State level who contribute a very substantial portion of the cost of providing medical and health professions education.

I will get on that point in a moment.

I think the legislation should facilitate and encourage cost containment in medical and other related education programs, just as those education programs ought to facilitate cost containment in the delivery of medical care.

Senator KENNEDY. How are you going to do that?

Mr. DUNGAN. I have some suggestions along the line, if I may, Senator. We should certainly be facilitating the access of qualified men and women, regardless of their economic circumstances or their ethnic background, or the educational advantages or disadvantages that may have been available to them as they have come up the schooling stream.

I also believe very strongly, Senator, as a State official particularly, and speaking for many other State officials, those involved in education as well as others, that it is important as we draft this legislation that we look toward a real partnership, not a formal polemical partnership between the Federal Government and the States.

Health commissioners in particular, as well as educational officials have an important stake in how this bill is drafted, and how the manpower that I hope will result from it gets distributed.

With those basic principles let me talk now to some of the practical aspects—some of the issues that are before you.

The first one I assume is capitation. Certainly it concerns most of the medical schools, many of my colleagues who are responsible for budgeting, and the subcommittee itself. I believe that capitation ought to continue, if for no other reason than a certain moral commitment on the part of the Federal Government that has moved many States and privately supported medical schools, into growth.

I do not think the Federal Government, given its past expansionist policies, which emphasized brick and mortar in the past, can let these medical schools or other health facilities just dangle out there or abruptly terminate capitation.

However, I would put very tight strings on those capitation awards. I would suggest a minimum award that would be available to everybody, if you will, just because they exist, say on the order of \$700. And I would permit the capitation to go up to, let us say, the current level I think is \$1,500 per student, if the institution had certain characteristics, and made certain commitments.



The three that I think are most important by way of restricting that maximum capitation award would be either an indication that a school was going to expand its capacity to a reasonable degree, or already had. Many, many have already optimized or maximized their capacity in one way or another. Some have not.

Therefore, I would think it very desirable not to base the capitation on an absolute growth if the medical school already on its own, for one reason or another has expanded. So I think evidence that they have expanded, or intend to expand should be a first condition for eligibility to receive the maximum capitation award.

The second condition, and I will talk about this in a moment, has to do with National Service Corps. I think 50 percent of the spaces as a minimum ought to be reserved for students who voluntarily would enter into the scholarship arrangements and subsequent obligated service commitments.

And third, I believe a medical school, in order to receive the maximum capitation should voluntarily agree to convert 50 percent of its graduate education places—residencies—into primary care residencies. This, of course, implies a cutback in training of physicians in specialties and subspecialties which are already substantially in surplus.

It would be helpful if the legislation or the committee report could encourage medical schools to establish these residencies in ambulatory care centers such as HMO's and neighborhood clinics as well as in medical centers or affiliated community hospitals.

Senator KENNEDY. Are you talking about 50 percent here?

Mr. DUNGAN. Yes, sir; I would say 50 percent of the residencies shall be in primary care within 3 years—15 percent the first year, 35 the second year, and 50 percent the third year out. Make no mistake about it, this turnabout will not be easy. I know members of this subcommittee and others are very aware of this. It is a difficult thing to turn around entrenched attitudes of medical educators, noble beasts though they all are. You all of a sudden are not going to change a big surgical department and take the funds and other things allocated to it and turn it into primary care. It will be very difficult.

I would phase in—with the ultimate objective being 50 percent of residencies in primary care areas. When I use the term primary care, I ought to be clear what I mean. I am talking about general obstetrics, general pediatrics, and general internal medicine as well as family medicine as a specialty itself; anything that gets the physician in direct contact with the ordinary day-in and day-out difficulties in the medical field.

Let me turn for a moment to the scholarship provision to which I alluded a moment ago.

We believe that the Federal Government ought to go very heavily into a scholarship program or, if you will, a loan program. I do not distinguish them. Something in the order of \$15,000 a year, which I think would effectively remove any economic barrier to access to medical education. I believe this amount should be available to any student who indicated he or she would go into underserved areas upon completion of 1 year of graduate work.

Not unlike, for example, the present scholarship programs that the Navy and other military services have for people who agree to sign up for obligated service with the military forces. I say \$15,000 because of current cost levels: That currently would cover living costs



for a single young man or woman, or a family, at a very low or modest level I might say, plus what might be eventually cost of attending the institution.

In addition to this scholarship program, the committee may wish to consider whether the loan limits under the Federal guaranteed student loan program should not be raised at least in the case of certain graduate and professional programs such as medicine and dentistry. We have recently done this in New Jersey under our State guaranteed program because we found that the present loan maximums were unrealistic in terms of present day costs.

Let me now turn for a moment, if I may, Senator, to the question of expanding enrollments.

In addition to the principle that I mentioned, or the limit, if you will, on the eligibility for capitation, I think the bill probably ought to take a look at and try to influence the way that expansion takes place.

I believe that the legislation which you are considering should authorize Federal expenditures in support of efforts by medical schools and State agencies like ours to expand the output of physicians other than by physical additions to existing schools or medical centers. The previous witness, the dean of the University of Hawaii Medical School, wisely observed the desirability of using community hospitals, suitably equipped and staffed, to provide medical training. Just yesterday the assistant commissioner of education in New York told me of plans which that State has to assist several community hospitals strategically located around the State so that these hospitals can take on major teaching responsibilities.

Similarly, we should utilize the substantial investment, society has, in excellent biomedical facilities in universities in all parts of the country.

You are very much aware, I know, Senator, of the decline in the demand for Ph. D. candidates in all fields, biomedical sciences less so than some others, but still there is a dropoff in demand, making available a very highly developed capacity for biomedical education in our great universities from one end of the country to the other. They are, on the whole, I would suggest, today underutilized.

So, in thinking of expansion, I urge the subcommittee to think not only in terms of "Marcus Welby's Medical Center," but I think of other facilities that are available in the community, both in the universities for the preclinical period, and I would say in good community hospitals for the clinical training.

In addition to taking advantage of existing facilities, the advantages of enhancing and improving health care to the communities in which the clinical centers are located are great indeed. In other words, I believe we should move toward the notion of regional affiliated clinical training centers, where you would be training both undergraduate medical students and other health professionals, as well as offering family practice or primary care residencies and other residencies. Such an arrangement would make a large contribution to the number of health professionals who are being trained, and it would also enhance the quality of medical care.

Senator KENNEDY. In the existing bill we had special project grants.

Have any of the schools up in New Jersey attempted to try and develop a program such as this to see whether it would fly or not?

Mr. DUNGAN. We are opening what we call a medical education program—an outreach from our existing two schools—in the southern part of the State, using clinical facilities already existing down there. We have not gotten any of those special grants. I do not know if anybody else has.

I talked to my colleagues in New York yesterday, and they are able to open up three major clinical facilities, and talking about \$2.5 million apiece to enhance those community hospitals in order to upgrade them to so-called teaching hospitals, and these will then affiliate with preclinical training assets, either in existing medical schools or in some of their large universities.

He did not mention his intention to go for Federal grants to a system in this work. In any event, maybe what we need to do is take a look at existing authorizations and polish them up and make them more specific in terms of increasing the quantity of health professionals being trained.

I guess what I would really basically say, Senator, is no one should attempt to build larger medical centers. There are good facilities out there that can be enhanced to provide quality education and, at the same time, enhance the quality of medical care on a regional basis.

The point I would like to underscore here is if, as, and when this is done, I would hope, under general legislative directive, administrative authority, the Secretary of HEW—that the Secretary be obligated to work in the development of those networks with local health commissioners and local health educators, and not make those decisions from here.

Senator KENNEDY. I think that is a useful suggestion. In drafting, it is not always possible to do the things you would like to do.

Mr. DUNGAN. I understand.

Senator KENNEDY. But let us try. It is a good suggestion, very worthwhile.

Mr. DUNGAN. I might make that same comment, Senator, with respect to who makes the decision of what is an underserved area, and to which one the young men and women who sign up under the scholarship go.

I think it is terribly important that we keep that concept of underserved area very broad so that we are not only talking about needs of the underserved areas in low population parts of our country, which, God knows, need that help, but I think we also have to look at the underserved needs of the large urban centers. I am certain this subcommittee would have that very much in mind.

Once again, however, I think it is extremely important for the Secretary, in making those kinds of decisions, to be making them in conjunction with responsible State health officials. In fact, I think there ought to be a collection of State health commissioners, a commission or committee that would be advisory to the Secretary so that those decisions could not be made unilaterally and based on some particular pressure which might be important, but it might not be the whole picture.

In other words, the more balance, the more pluralistic input there is to that decision, the better. These are the major elements that I think we would want to see in any bill that emerges from the Congress.

I would like to suggest that there ought to be a provision, as there is in present law, to provide flexible grants to do a variety of things.



For example, the proposals of the administration, as I read them, would cut out veterinary medicine, optometry, and podiatry from continued capitation grants. I am not sure that that is so wise.

For example, I think one might very well want to continue, indeed, I would advocate the continuance of some level of capitation support, particularly to eye care.

My feet are pretty good, and I am not that hung up on podiatrists, but certainly with respect to optometry, then I would come in with special grants to begin to tie some of these specialties into the mainstream of the medical education process.

For example, one could enter into arrangements with the Pennsylvania School of Optometry to work into HMO's or health centers, clinical training centers, such as we have discussed, anywhere in the eastern area, in order to build eye care specialties close together, instead of forcing the optometrists, the opticians, and ophthalmologists further apart, and let us try to pull them back into common-practice situation so each of them can operate at an appropriate level of their expertise.

That is not the case today, as you know, in eye care, and I only use it as an example.

They tend to be separated from one another.

I think it is desirable to try to find ways to facilitate their coming together in a common-practice situation. They really need leadership, not to be presumptuous about it, from outside their own professions.

My testimony would be incomplete if I neglected one additional question.

While I think the primary emphasis is quite appropriately being placed by the subcommittee on the education of physicians and dentists, the long-run solution, it seems to me, to our health care problems, and that is the basic purpose of the whole thing anyway, is going to depend on how well we integrate the so-called health extenders, whether we are talking about nurse practitioners or physicians' assistants or X-ray technicians, or specialized nursing personnel of one kind or another, or optometrists.

There is a continuum, as you know very well, Senator, in the health care delivery business, and I believe it is important to give very careful attention to ways of providing better training and better opportunities, what I call generically the health care extender. It may not be appropriate in this bill—it may be a subject that you will want to give further consideration to, but I think this is an important aspect of it. Indeed, it might very well be that inducement could be made to medical and dental schools to integrate so-called health care extenders into the medical education or dental education, or any of the other prime specialties.

Senator KENNEDY. You understand the primary problem is this is not only medical education but licensing provisions in various States?

Mr. DUNGAN. Very well I do.

Senator KENNEDY. Should we preempt them?

Mr. DUNGAN. I believe that we are moving toward a form, if not of national health coverage, that we are going to be looking at the health problem as a Nation and not as neighborhood or State or even a region, therefore we should be moving toward national licensure.

We would encourage it. It gives you a good deal of mobility in terms of your personnel, which now is obstructed by licensing barriers.



I am not certain—this is because I do not consider myself anywhere even close to being an expert in the field—I am not sure we know enough about the licensing business from outside the professions.

For example, in New Jersey, Senator, we are one of the few States, I think, that have laymen on licensing boards. I happen to sit on the Board of Medical Examiners, and I must say I find myself——

Senator KENNEDY. Well, you have national boards for doctors and the rest. Why not have national boards for various kinds of professions?

There are different and varying grades in different States, so why not do the same thing in these other areas and have some minimum requirements. And then if a State wants to tag on some additional kinds of requirements to raise the criteria even higher, then we have that.

But, as you point out, we have got some States that have not flunked a resident of their State for 10 or 15 years in some of these subspecialties.

I understand you are talking equally about trying to integrate these various kinds of professions into the whole kind of a health treatment, and I think I am in strong agreement with that.

To the extent that we can do that through the manpower legislation, I, of course, am terribly interested.

Mr. DUNGAN. That one, and then I would like to get back to the licensing, is in your special grants, or whatever, you have a bag to do good things, I presume, one of the possibilities might be to induce primary medical training facilities, such as medical schools, to again, let me just use my optometrist friends, as an example, to train optometrists in the clinical setting with ophthalmology students, when the student is rotating through ophthalmology, wherever that clinical training facility is, there are also optometrists going through the same thing, or putting them in an eye-care facility.

What I am saying is if the money goes out there in the way of grants, I think you will find that medical schools are, like all other human beings, they tend to go where the sources are.

To jump back to licensing, Senator, I think it is an extremely important thing, I was hedging a little bit, because I personally am uncertain about whether it is possible to develop standards immediately, but I agree with you that that is the direction in which we ought to go. And if this committee would be satisfied that those standards can be developed, that is excellent.

If I may suggest, however, the standard for getting in the door is only about, in my judgment, 10 to 25 percent of the problem. It is monitoring how the person performs once they have slipped by that examination, or whatever it is they get them in, and that is where I believe one again has to work toward the strengthening of the local and State operations, rather than what I think the tendency would be in national licensing is to relieve responsibilities down at the local level.

Another reason, for example, of tying it into PSRO operations, which are fairly, I would say, in the developing stage, not matured yet, the book is not in on them. We do not know how successful they are going to be in monitoring the quality of care.

On the whole, licensing boards, in my opinion, in medicine have not been very good. I am not sure of licensing standards. Maybe that is not major thrust.

Senator KENNEDY. A lot of that is because they have not got any teeth in the licensing boards. You cannot take a license away unless it is a drug-related charge, or morals charge.

Mr. DUNGAN. That is correct. I presume a national licensing statute would not only contain standards for entry, but also the delicensure standards?

Senator KENNEDY. Well, I would like to see it. I will take as much as we can get. But it seems to me if you provide them with that kind of authority and held them accountable, I think that this would be an important factor in the whole area of malpractice.

Mr. DUNGAN. I agree.

Senator KENNEDY. The problem of the whole area in malpractice is financing, and we are not doing much about quality. That is why ultimately I think we are going to have to have some Federal legislation.

Few, if any, States are dealing with the quality implications of that. Most of those State commissioners really do not quite understand that.

Mr. DUNGAN. I would like to make a plea here of general philosophical nature that would apply to this field as all others.

I think as we run into social problems, such as the one we are talking about, how does one assure the quality of performance of an important professional to the community. I think one has to resist—I say this as an old Federal bureaucrat—the temptation to move in and solve the problem.

I believe the appropriate role of the Federal Government is to set those standards, and set them high. And force performance at the local level.

Senator KENNEDY. That is right.

Mr. DUNGAN. What we have not done very well, over the years I think, is to force that kind of performance down at the local level.

Well, I think I have touched the major points that need to be brought to the committee's attention.

Senator KENNEDY. There are some points I am particularly interested in having your comments on, and one is New Jersey is dependent heavily on these foreign medical graduates.

Mr. DUNGAN. Very much so.

Senator KENNEDY. We are considering the tightening up of the various provisions of it, to insure quality, and to insure also being able to communicate language. I am just wondering what your views are on this particular matter.

Mr. DUNGAN. I have very strong views on it. We are, as you suggested, very heavily dependent in all of our hospitals on foreign medical graduates. I look at this two ways. I look at it in terms of reverse brain drain, if you will.

We spend millions of dollars to build up medical schools in India, Chile, wherever, in order to enhance the care of people there. Then we pull their physicians here. I think that is a slightly suspect practice. But even more importantly in terms of our own situation, I think we have to begin to phase out the reliance, what I consider the excessive reliance.

Your question to the dean a little bit earlier seems to me a very minimum thing to do, that is, insist on performance standards as well as English language capability on the part of any foreign medical graduates that are admitted.



When I say performance standards, I do not mean passage of the flex exams. There is no reason at all why one cannot screen a foreign physician for his capability to adapt and operate as well as his technical capability in a U.S. setting.

The tragedy, and I am sure you have seen it many, many times, going around to emergency rooms in most hospitals, certainly in New Jersey, is a patient that comes in and cannot communicate, not only cannot communicate, but where there is a disjunction culturally, and otherwise seems to make the probability of adequate care remote indeed.

So I think we have to adopt procedures. Some of the debate about how strictly and suddenly one cuts off the supply of foreign medical graduates I think is an open one. Part of it depends on the success in getting the scholarship provisions about which we spoke earlier through and making sure we have an adequate supply of U.S.-trained men and women coming back into these underserved areas.

I might say, Senator, although I did not treat it specifically, that another device to reduce dependence on foreign medical graduates is to better utilize U.S. citizens who are now studying in foreign medical schools. Many of them are coming back, as you know, under so-called fifth channel, or fifth pathway programs.

We have large numbers in New Jersey coming back that way. That is another area, it seems to me, which this bill might attend to in order to induce existing schools to bring U.S. citizens who are in foreign schools back in and get them into the mainstream of American medicine.

All of these efforts to increase the number of U.S. trained physicians, to use that as an example, are part of the solution to the foreign medical graduates problem.

To the extent that one is successful in increasing the supply of U.S.-trained U.S. citizens one can take more aggressive action, and I believe we should, on the foreign medical graduate problem.

Senator KENNEDY. Part of the problem with this, the foreign medical graduate, is the ability to come here under this J-visa, and be able to convert to permanent status, stay in the United States.

Do you think we ought to alter that and change that?

Mr. DUNGAN. Yes. I think it should be tightened up. I think we should apply the same tough standards to issuing of these visas as to granting of permanent status, as we do to visas of other people in other categories, such as political refugees.

Also I believe, to be practical, that the foreign medical graduate is exploited in many situations in the United States, both in public and private community type hospitals. That is a tragedy.

Senator KENNEDY. What about the buy-out provision? You know we are considering a double payback and compound interest.

Mr. DUNGAN. I think, to my mind, the principle of voluntarism in that scholarship program is extremely important to preserve. Therefore, I do agree with those who propose to permit that buy out, whereas a man or woman somewhere along the line decides that he does not really want to fulfill his commitment, and I think that is important.

Senator KENNEDY. On the capitation, you spell out a sliding scale.

Dr. DUNGAN. Yes, a sliding scale.

Senator KENNEDY. I support the idea that there will have to be compliance with some of these other aspects of our manpower program,



which indicated that they develop a family practice capacity, and also they meet these minimum requirements of having whatever percent we can agree on, hopefully 50 percent in primary care.

Would you also feel that it is fair to put such a condition on it?

Mr. DUNGAN. Yes. I would have only that caveat, that is the expansion of capacity which has been discussed.

As I tried to point out, many medical schools, particularly public ones, under State agencies like ours, have pushed that expansion pretty much. I think you ought to set that out as a principle and let the Secretary determine whether there has been a substantial effort made by the medical school to expand its capacity.

If he is satisfied that they have made that effort, then it seems to me they ought to be eligible for the maximum capitation subject to the fulfillment of the other two objectives. That is, going heavily toward primary care residencies, and reserving 50 percent of their slots to medical scholarship winners.

Senator KENNEDY. Let me ask a question, that is, if we go this route, I suppose there will have to be some adjustment made on tuition. The argument is made we cannot do this because State legislatures are not going to be able to act in time and all the rest.

You have had experience in this.

What are your thoughts?

Mr. DUNGAN. I did not want to raise the crass financial aspect of it from a State's point of view. I will tell you right now what I have been suggesting provides very substantial relief to States if they will move in shifting the burden of the cost of medical education from the taxpayer over to the recipient. This is one area where I think it is very, very clear that the taxpayer takes a beating, even over the lifetime of relatively high earning capacity, at least under present conditions of physicians.

I was reading, for example, coming down on the train this morning, a young man, 33 years old, a graduate of our medical school, practicing with heavily medicaid clientele, made \$240,000 and some last year—33 years old, pediatrics, in the city of Newark, under medicaid program. He said he is delivering excellent care. I am certain he is. He is also being very well rewarded.

So I think there is no doubt that tuitions will go up under the provisions I have suggested. We will certainly be advocating that. I shall.

Senator KENNEDY. Should we try to establish some sort of a self-pay revolving fund for this program?

You may very well get to the point where their program is really paying for itself and relieve almost completely the burden on it.

Mr. DUNGAN. Would you not presume, though, that most of the students would fulfill their commitment and not buy out?

Senator KENNEDY. Yes.

Mr. DUNGAN. The price was low.

Senator KENNEDY. This is an area we want to look at.

Do we need an HEW program to limit the residencies?

Mr. DUNGAN. I am not sufficiently familiar with the way decisions are made as to how many and what residencies.

But if anything like the way decisions are made with regard to other graduate programs that is under the control of the discipline essentially, then I say there is no way that you are going to restrict

and allocate in a sensible manner these residencies other than by some central planning mechanism.

The decisions to do or not to do might very well be left to regional boards among medical schools.

In general, the planning parameter, it seems to me, has to be set nationally, and I think it could be set by the Secretary with the appropriate professional inputs.

Senator KENNEDY. You mentioned earlier about the cost controls on legislation. I do not know if you would like to either comment on it or send us a note on it.

Mr. DUNGAN. It is a tricky area.

One of the major things, of course, that one can do in this bill, I think, to reduce the cost of medical schools, the cost of medical schools, as you know, do not tend to be the straight instructional cost of the undergraduate student, but they tend to be all the add-ons. That is this or that or other things.

So you seem to be in the area of service delivery.

What this bill might do in this connection is to induce collaboration among, let us say, open heart surgery facilities in community hospitals and/or the medical schools, so a medical school does not have to have its open heart surgery in three others in the region, too.

If you kind of pull them together, that is the way I think we can get at reduction in cost.

I think the capitation device is not a very effective instrument to do that.

Senator KENNEDY. Well, I think this is very helpful, and we appreciate your comments on it.

To the extent you can get the rest of your colleagues around the country to endorse the same position you have taken here will be very good.

Mr. DUNGAN. That is a very interesting aspect, if I may comment on that.

What is interesting to me is to see how this ballgame has been played with the same group of players, and a larger group of people have not involved themselves in issues that are fundamental to both health care and looking at it from the State point of view, the fiscal side of it.

It is a curious phenomenon. I think it is one that needs to be addressed.

As I went around, for example, and I will be frank, one of the most significant things in this field that has happened was Secretary Cooper's testimony to you in September, largely due, I daresay, to the educational influences of certain members of this body. Most people were not aware of that radical change in administration policy and what it portended or what I hope it portends for a bill coming out of the Congress, and a change in the system.

Now, that they were not aware is somewhat tragic, and I find, even among the medical professions, that is medical educators, many of them were not aware. So I think you may find a good deal of support coming out from quarters where you normally would not have found it for the approach that the subcommittee has taken.

Thank you very much.

Senator KENNEDY. Thank you. You have been very, very helpful.

Mr. DUNGAN. Thank you.

[The prepared statement of Mr. Dungan follows:]

STATEMENT OF RALPH A. DUNGAN, CHANCELLOR OF HIGHER

EDUCATION FOR THE STATE OF NEW JERSEY TO THE

SENATE SUBCOMMITTEE ON HEALTH MANPOWER OF

THE SENATE COMMITTEE ON LABOR AND

PUBLIC WELFARE OCTOBER 31, 1975

(1915)



Mr. Chairman:

I am delighted to appear here this morning as Chancellor of Higher Education for New Jersey. As you know, state agencies like ours throughout the several states have comprehensive responsibility for coordination of all forms of collegiate and postsecondary education including medical and dental schools. I appear before you this morning not as a spokesman for my colleagues in other states, who are organized in an association called SHEEO (State Higher Education Executive Officers), but I do want to underscore that many of the views which I shall set forth are shared by many of my colleagues in the several states. I fully expect that you will be hearing from a number of them, particularly those who have major responsibilities in the areas of medical, dental and other forms of health professions education.

Prior to discussing some of the practical issues before this committee in the matter of federal financing of health manpower education, I would like to set forth some general principles or observations which I think should undergrid federal action in this important field. First of all, a principle which I am certain we all share is that health manpower legislation should enhance the quality and availability of medical care to all citizens.

Secondly, the bill should induce, where it reasonably can, an emphasis and I repeat an emphasis not an exclusive thrust, on medical education, which places the highest priority on the application of known therapies and the

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provision of service to the millions who do not presently receive it, rather than place emphasis, as the present system tends to, on the unusual, the esoteric, and the specialized.

Thirdly, this legislation should facilitate and encourage cost containment in medical education and other health education programs to the extent that we can do so by legislation.

Fourthly, it should facilitate access of qualified men and women into the health professions, particularly as regards the removal of economic barriers or educational barriers which historically have tended to restrict the entry of blacks and other minorities. In this respect I believe that provision should be made to fund imaginative and effective programs for facilitating the entry of minorities. This is something that has been addressed to some extent by federal programs and which should continue to receive significant support.

Fifthly, as a state official, I believe that the legislation should begin to recognize more specifically than previous legislation the major stake, financial and otherwise, which the states have in the field of medical and other health professions education. Federal policy in the past has been based fundamentally on the assumption that medical and other health professions education was a matter between the schools and the federal government. It is not. The states, their communities, governors, health commissioners, human services officials, as well as higher education officers all have a

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vital interest in these matters, and I believe that they should be involved in specific ways.

Finally, in addition to my strong belief in the need for greater federal-state interaction, I also believe it is time for all of us to accept the fact that without strong federal intervention in this matter of health manpower, it will be extremely difficult to change the existing system so that it is more responsive to the health needs of our citizenry.

Let me now turn to certain specific issues that should be addressed by federal health manpower legislation.

A. Influencing the Health Service Delivery System and Education Costs

We should use the educational system as a means of influencing the emphasis, quality and structure of the service delivery system, particularly with emphasis on the needs of our presently underserved areas, both urban as well as rural regions. Likewise, federal support for the educational system should foster the efficient use of resources and induce constraints upon booming costs.

Obviously this requires that the federal government use its leverage over what the educational institutions do, and a principal means of exercising leverage is through the extension or withholding of financial support. This raises the question of capitation. I believe that some amount of capitation support should be continued, if for no other reason than the moral commitment assumed by the federal government when it encouraged many states and private institutions to



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become engaged in these expensive health professions education processes. I do not think the federal government, given its past expansionist policies, often emphasizing brick and mortar construction programs, can allow these schools to just dangle out there by abruptly terminating capitation.

Recognizing this residual obligation, however, does not mean that certain obligations cannot be placed on recipient institutions which would reflect defined federal policy objectives. Nor does it preclude the extension of general support to all health professions schools in selected fields, in recognition of their high cost and contribution to meeting a broad national need for personnel, while at the same time making additional support contingent upon these schools' adopting or adapting their programs to fulfill national goals.

Specifically, I would propose that the federal government continue capitation on a two-tier basis. A minimum capitation award at least for the next several years should be granted, of something in the order of magnitude of \$700, to every school of medicine, osteopathy, dentistry, and pharmacy.

Awards beyond that level should be tied to some performance standards. Federal dollars should be made available in generous amounts—up to an additional \$800—to induce major shifts in present patterns of health professions education. The approach advocated, moreover, can be adapted flexibly to changing requirements and objectives, as opposed to one where the disbursing of funds is based solely on enrollment.

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I would suggest that to be eligible to receive these second-tier capitation awards a medical school would:

- a) have to indicate a willingness to expand its capacity to a reasonable degree, or demonstrate that it already has optimized its capacity;
- b) reserve at least 50 percent of its capacity for federal loan or scholarship holders who would enter a national service corps;
- c) agree to convert, within three years, 50 percent of its graduate medical education places (residencies) into primary care residencies;
- d) maintain its per student operating costs within levels established by the Secretary of HEW.

These criteria, while applicable only to medical schools in their entirety, can be extended analogously to other health professions schools. With respect to medical schools, however, I recommend expansion of capacity for several reasons:

(1) a need to replace FMGs upon whom we are excessively dependent; (2) to get better utilization of very expensive installed facilities; and (3) the needs of what I hope will be an expanded and improved health delivery system. The requirement for reservation of spaces is, as you will note below, related to the development of a generous voluntary scholarship program as a means of getting at the maldistribution problem.

The primary care residency requirement implies, of course, a cutback in the training of physicians in specialties and sub-specialties which are already substantially in surplus.

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Moreover, it would be helpful if the legislation would encourage medical schools to establish these residencies, at least in part, in such ambulatory care centers as HMO's and neighborhood clinics, and not base them totally at tertiary level medical centers or even community hospitals. In recognition that conversion to 50 percent residencies in primary care cannot be accomplished overnight, my suggestion would be that compliance be based upon a 15 percent level the first year, 35 percent the second year, and the 50 percent level the third year out. In referring to primary care I include not solely family medicine, but also general obstetrics-gynecology, general pediatrics, general internal medicine, and possibly also a general psychiatric residency emphasizing the broad needs of the population in this field rather than the preoccupation all too often apparent among our psychiatric practitioners for the concerns of the more affluent members of our society.

Finally, present legislation neglects an essential policy objective which the federal government is in a unique position to influence—namely, medical, dental, veterinary, etc. education cost containment. The extraordinary expense of these education programs needn't be belabored, and the \$20,000 plus per student medical education costs at our New Jersey medical schools are high, but hardly unique. It is these massive fiscal requirements which constitute the single most inhibiting factor against expansion of health professions school spaces to meet our manpower requirements, as well as student interest in entering these fields. The problem for the individual school or state funding agency like the New Jersey Department of Higher



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Education in attempting to contain costs, is the impossibility of effecting anything significant from the narrow base over which we have jurisdiction. I have discussed this with many of my fellow chief state higher education coordinating officers, who likewise are seized with the problem of cost control in this area. There is agreement that individually we enjoy little leverage at the same time that we lack an effective mechanism for realizing our collective objective. The problem is that we are victims of the market place: individual medical schools, for instance, are pressured to meet the competition regarding salaries, faculty-student ratios, investments in research activity, etc., all of which is reinforced by strictures and attitudes of the accreditation groups. While I agree we must provide a high quality educational environment through adequate support to our health professions schools, it is obvious that some balance must be brought into the situation regarding their costs. Here is where I believe the federal government has a unique role to play.

Senate Bill 992 in fact broaches the subject by providing capitation monies, up to one-third of the net education costs. These costs are defined by the methodology and findings of last year's National Academy of Science-Institute of Medicine (IOM) study. This provision, however, is open-ended and would do nothing to delimit or contain future cost increases.

I would recommend two approaches to this question. First, as a means of putting a damper on continuously rising

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costs, I would reduce an institution's capitation award by some amount if its instructional (as opposed to hospital or clinic costs) costs exceeded the median of U.S. schools. Secondly, and here I am departing from the capitation formula, I believe some inducements to more cost effective techniques should be offered, e.g., joint departments in two proximate medical schools, support of more cost-effective training environments such as more extensive use of existing community-based health care facilities. These special grants to induce more cost effective techniques should be available to central university administrators, state agencies, budget offices or Governors who very often have as large or a larger stake in more cost effective techniques than the medical schools themselves.

#### B. Student Aid and Defining Underserved Areas

We strongly advocate a generous aid program--scholarship or loan, I am not concerned which is employed--program for students who voluntarily commit themselves directly to the federal government's national service corps, to serve in positions of priority public need after completion of an internship or residency. We would suggest about \$15,000 per year maximum with a total of \$60,000 for any student. Such a person would serve in such a high priority position one year for each \$10,000 or fraction thereof which was utilized by a student during his or her training.

A buy-out of the service contract should be permitted on the basis of double the amount provided with compound interest. The reason for the high buy out premium is obviously the high earning potential of physicians. Finally, I believe that just

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as involvement of men and women in the program should be voluntary, it would be healthy to insure maximum freedom in negotiating one's obligatory service assignment. One way of achieving this might be to establish a mechanism analogous to that used for matching students entering internship and residency programs with hospitals offering these programs. National service corps physicians would list, in priority order, their preferences from a national list of available slots, with the employees making the final selection.

To elaborate a bit on this point, it will be important to recognize that the slots in which medical schools are located should have first claim on the manpower they produce. For example, if a state like Ohio with seven schools, or New York, are producing large numbers of people and they have a large unmet need, they ought to have a first claim on the manpower they are training for obligated service, before you send them to Montana. A minimum of any state's output--say ten percent--could go into a pool which is used on an interstate basis, but then the needs of the state should be addressed before any further graduates are placed in the national pool.

Another decision needed is the definition of what are the underserved needs in the states. That has to be agreed upon by the federal administrators and such state people as health commissioners and educators. The federal statute should specify in fairly general terms what factors the U.S. Department of HEW ought to take into account in describing the underserved universe. Within that framework, my belief is that the identification, location and description of the number of slots



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required in any given year ought to begin at the state level. Once these state determinations are made, and in the context of the legislative criteria, HEW with the assistance of a national advisory commission could make the final determinations.

### C. Expanding Enrollments

With respect to the question of expanding enrollments I very strongly favor such action, but think that the legislation ought to be carefully drawn so as to: encourage expansion in a manner which is most economical; best use of facilities that are already in existence and capable of providing training; and facilitates experimentation with new educational modes and settings. Secondly, the educational settings supported by the federal government should have a direct impact, if possible, on the quality and thrust of service delivery.

We should get away from the excessive reliance upon the large, overly sophisticated medical centers and train our medical students in settings closer to the situations in which most will eventually practice. Therefore, in general, I would be against those construction grants which tend to build up large research and tertiary care-oriented medical centers. The best way to design this, in addition to providing for expansion of enrollments, would be to make some grant monies available for what New York, as an example, is trying to do by utilizing basic medical science facilities in established universities. Princeton, in the case of New Jersey, would be a hopeful locus for us.

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In addition, there ought to be sufficient grant monies available to medical schools which are interested in expanding their enrollments by developing community hospitals as a clinical teaching base. In order to expand the clinical teaching programs, the schools should be induced to develop a network of training facilities centered around existent community hospitals. These would serve not only to support residency programs, but also as sites for the conduct of undergraduate medical training as well. Consideration should be given as to whether this kind of support for development and rational planning of state resources, hospitals as well as universities, might not be made to a health commissioner or a department of higher education like ours, rather than to medical schools directly, because of their specific responsibility for consideration of state-wide requirements and resource allocation.

In summary, there ought to be grant monies available for capital to enhance community hospitals as clinical training institutions. These should be meshed into a regionalized clinical training program, which will have the double effect of providing additional opportunities for quality training for medical students and residents, and also enhance the quality of care provided in these community hospitals.

#### D. Remote Site Training

Related to the previous point, I support the provisions of HR-5546 (Title VII: sec. 771(a) (2) (A)) dealing with remote site training. I believe that this provision would insure a more

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continuous flow of medical services to underserved areas. Within our own State, such a provision would speed the development of our South Jersey Medical Education Program in which a proportion of our medical school students will receive their clinical training in the southern area of the State which is badly underserved.

E. Specialty Distribution - Foreign Medical Graduate Situation

Title VIII - Medical Residency Training Program of H.R.-5546 was stricken from the bill during the House debate. Similar titles are in S-990 (Title XIV) and S-992 (Title VI). I strongly support the retention of this component of the legislation in any bill enacted.

There is a need to develop a mechanism that can begin to address the problem of specialty and geographic maldistribution of physicians as well as the continued overreliance on foreign medical graduates (FMGs). It will interest you to know that in New Jersey 23 percent of all of licensed physicians in 1974 were FMGs, and that 75 percent of all of our internships and residency slots in 1974 were filled by FMGs. While our situation in New Jersey is one of extreme dependency, the national picture is poor indeed. The specialty maldistribution problem is equally bleak. For example, the recent Study of Surgical Services for the United States, sponsored by the American College of Surgeons and the American Surgical Association themselves, attests afresh to the fact that we have a surgical manpower glut of at least 20,000, even while other authorities indicate



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that many vital specialty areas are undermanned.

Those opposed to Title VIII of H.R.-5546 claimed that as a result of past federal support the number of physicians in primary care has increased and therefore the mechanism was not needed. While there has been a substantial increase in the number of these physicians, the problem has certainly not been solved and, further, the problems of geographic maldistribution and FMGs still remain. I believe that these problems can be effectively dealt with under this title. By establishing residency programs in a needed area (considering specialty as well as geographic factors), we can be reasonably assured that physicians will tend to locate in these areas since many studies indicate a high correlation between the location of training and eventual practice. Furthermore, by establishing reasonable ratios between the number of American medical graduates and approved first year residency positions, we can gradually eliminate our dependence on FMGs. I have very little confidence that without this type of federal intervention the system will correct itself.

I would recommend, however, a gradual implementation of these ratios because of the obvious difficulties involved in institutional change. Furthermore, I believe that special consideration should be given to public health facilities that historically tend to rely heavily upon FMGs (i.e., exceptions should be permitted on a case by case basis).

Supplemental state action is also required to deal with these problems. In New Jersey we anticipate that legislation will shortly be introduced that would establish a governmental mechanism, with an advisory council to the Board of Higher

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Education, responsible for planning and funding medical and dental residency programs in terms of the geographic location and specialty offering. Since I understand that the accreditation agencies in medical education are reluctant to assume the responsibility that they would be called upon to undertake under Title VIII of H.R.-5546, I would suggest that the federal legislation encourage the formation of similar state agencies, perhaps offering seed money incentives, which would in turn be gathered together for national planning purposes under HEW auspices.

Finally, with respect to the non-citizen, FMG situation we need to tighten up on our standards for admission under the immigration policy, and end the practice of giving them preferential visas. FMGs entering the country need to be really tested, not only as to technical competency, but also as to whether they will be adaptable to our society and culture since the bulk of them are going into direct patient care situations. We also ought to begin limiting FMG acquisition of citizenship and the extension of permanent residencies. Indeed, my own preference would be to encourage the return of foreign medical graduates, after completion of any graduate work, to their native countries. These remarks, of course, are to be taken with the previous admonishment that this has to be approached carefully, and not arbitrarily. Some states like New Jersey have a very high dependence on FMGs and we should only cut that manpower source off gradually, as it can be demonstrated that the obligated service mechanisms are filling the vital needs of the community.

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F. Minority Program

I would like to underscore the fact that despite efforts that have been made under many state and federal programs, as well as sincere efforts by medical schools, the minority population of the medical schools has not increased sufficiently. Grant funds should be made available specifically for institutions interested in designing and elaborating either new programs, or enhancing existing programs, that would increase the output of minority graduates. I would be inclined myself to insist that before monies are granted, that receiving institutions should commit themselves to admitting some minimal proportion of minority students to their school. In other words, they ought to be secure enough and committed enough that they will guarantee, in return for the grant, the attraction and admission of a certain number of minority students.

G. National Licensure of Physicians and Dentists

I support proposals to develop national standards for the licensure of physicians and dentists and the development of procedures to evaluate the competence of practitioners of medicine and dentistry. National licensure and relicensure provisions should increase the flexibility of movement of personnel throughout the country, thus having a positive effect on manpower availability as well as quality control. I would recommend, however, that such relicensure standards be integrated with PSRO and other developing quality control mechanisms and standards.



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It follows, moreover, that standards for relicensure should be included to cover other licensed health professionals, such as pharmacy, optometry, podiatry, veterinarians, dental personnel, and nursing, which are all licensed in the 51 licensing jurisdictions, as well as chiropractic (licensed in all but Louisiana), and physical therapy (licensed in all but Missouri).

H. Incentives for Integrating Health Professional Education Programs

At the present time, federal legislation gives some recognition to the benefits to be derived from educating physicians, at some point in the training process, in an integrated manner alongside the physicians assistants they are presumably to work with in the future. But we don't do enough to stimulate a whole variety of such learning processes, which can begin to end the terrible fragmentation and compartmentalization which too often characterizes health care delivery. Not only should our laws further encourage such activity between physician and physician assistant programs, but I would certainly incorporate other physician extenders, such as nurse practitioners, under these provisions. In the field of dentistry, this same concept should be applied to the utilization of auxiliaries such as dental hygiene.

Moreover, there are untapped opportunities in a whole variety of other aspects of the health care continuum such as eye and vision care, and pharmacy and medicine. What is needed is explicit legislative language providing authority for contractual support of joint educational efforts in such areas. In order to insure that these efforts are related to the "real world," and

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don't just remain academic exercises, I also would provide support for related demonstration clinics to provide a testing ground and essential feedback to these integrated educational efforts.

Let me give you a concrete example of what I am referring to. In New Jersey our Department of Higher Education recently convened an interprofessional consortium of educators and practitioners in the eye and vision care sector. Included are representatives of ophthalmology, optometry, and opticianry, as well as members of relevant state agencies such as the Health Department and licensing boards. Within this forum, coordinated efforts have been started to develop a comprehensive plan for the integrated education of these professionals, as well as an appropriate eye and vision care auxiliary person. An integral element of this activity is the creation of a demonstration diagnostic and treatment center through which the students can be rotated for their clinical education. The clinic will apply the concepts of expanded role functions, and the team approach to the eye and vision care field, while using up-to-date educational and clinical techniques. Moreover, it is anticipated that the clinic eventually will be linked to the continuing education programs for New Jersey's eye and vision professionals. Our hopes are to effect a beneficial evolution in current practices and relations between practitioners and the delivery of eye and vision care services.

I think this kind of educational programmatic approach should be one of the major trends of the future, and the federal government has a unique role to play in encouraging its emergence.

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In conclusion, Mr. Chairman, I again wish to express my appreciation to the Committee for the opportunity to express these views which represent not only our point of view but are shared to a substantial degree by state officials throughout the country. I urge expeditious action on a new health manpower bill which hopefully will embody some if not all of the features to which we have referred.



Senator KENNEDY. Our next witness is Mr. Alfred F. Fisher representing the National Medical Association.

The National Medical Association has played an important role in health manpower field.

We are anxious to hear your testimony.

**STATEMENT OF JOHN A. KENNEY, JR., M.D., CHAIRMAN, COMMITTEE ON MEDICAL LEGISLATION, NATIONAL MEDICAL ASSOCIATION, INC., ACCOMPANIED BY ALFRED F. FISHER, EXECUTIVE DIRECTOR, NATIONAL MEDICAL ASSOCIATION**

Dr. KENNEY. Mr. Chairman and members of the committee, I am Dr. John A. Kenney, Jr., chairman of the Committee on Medical Legislation of the National Medical Association, Inc.—NMA. With me is Mr. Alfred F. Fisher, executive director of the NMA.

NMA is pleased to have this opportunity to make known its views on the proposed health manpower legislation; namely, S. 989 and S. 1357.

As the organization which represents the Nation's 6,000 black physicians, NMA is well aware of the overall national health manpower picture, particularly as it relates to blacks and other minorities.

Recognizing that available, accessible, and continuous health care for all Americans is the desired outcome from all of the proposed health manpower legislation, we have developed our comments on the various bills accordingly.

While we touch upon the administration's proposal to reduce capitation support for the Nation's health professions schools, medical residency programs, and national licensure of physicians and dentists, we intend to focus upon the adequacy of measures now before you to overcome the continuing significant under-representation of blacks and other minorities in the Nation's health professions schools.

We are not surprised, but we are dismayed that S. 996, the administration's health manpower bill, would gradually phase out capitation payments to medical schools, such that by fiscal year 1977, the support for each student would be so little as \$1,000 per student. This represents a decline from the present \$2,500 per year for each first, second, and third year students, and \$4,500 per graduate.

We are in complete disagreement with the assertion that the taxpayers should not be called upon to subsidize the professional training of physicians, dentists, and other health professionals.

The administration ignores the fact that medical schools and other health professions schools are national resources in their own right, and among the most costly of all educational institutions, which, in many cases, are too costly for students and local governments to maintain without partial Federal subsidy, given the increasing demands placed upon States and local governments for other services.

**MEDICAL RESIDENCIES**

The House struck title VIII from H.R. 5546.

Title VIII, in essence, would have limited first-year residencies to 125 percent of medical graduates in any given year. Such 125-percent

limit on the number of first-year residencies is essentially the same type of restriction on first-year residencies found in S. 989—see pages 128 to 148.

While we share with the proponents of control over residencies the concern for geographic and specialty imbalance, we question the need for rigid Federal controls on residencies, until our unregulated system has had opportunity to redress the imbalance between primary and nonprimary care.

Senator KENNEDY. What evidence do you have that that is going to be redressed or is being redressed?

Dr. KENNEY. I can say the very fact that the issue has been raised by proposed legislation as far as medicine to look at itself quite hard, and I understand, for example, the American College of Surgeons is looking very hard at the output of surgeons in attempting to address the matter.

Senator KENNEDY. What are they doing about it?

Dr. KENNEY. Well, not being a member of that august—I am a dermatologist, Senator, I should tell you. That is quite removed from the American College of Surgeons—I cannot tell you exactly at the moment what steps they are taking. I know that the subject has been addressed at their meeting and they are concerned.

I would hope, in this whole tenor here, that the American system of voluntarism and our being a democracy, which attempts not to force people to do things, would give our system a little further opportunity, a year or two, if you will, sir, to address this whole matter.

Again I think this whole subject in which I realize is a matter of great interest to you because of your questioning of the other two witnesses which preceded me along these lines, and realize that this is a very critical issue, but I would hope that we would give the medical profession itself a chance to work these matters out.

As I say, you could put a time limit on it, if you would like, before making rigid controls.

Senator KENNEDY. The thing that amazes me and shocks me is what the inadequacy of what the voluntary system of medicine has done for minorities in this country over the period of whatever years that we have had the medical profession. They have been closed out of virtually every aspect of the education system, the opportunities to practice. And for you to be here and speaking for the black doctors and suggest that this kind of system of voluntarism ought to be continued without real reform because certain people within the medical professions are taking a hard look at it, I must say surprises me.

You obviously are speaking for a group that has been through this particular system. It just amazes me to have that kind of willingness to go along with the system per se.

Dr. KENNEY. Al, do you want to say something on that?

Mr. Fisher has a comment.

Mr. FISHER. I would like to reply that we are concerned about that. But we also recognize that if there is a limitation on the number of special residencies, we are already well under-represented in special residencies, and if there is a restriction, we would have less of a chance in getting our graduates in the residency programs.

Senator KENNEDY. What is the basis for that?



Mr. FISHER. The basis is data available now that in the current residency programs, a third of the residents are FMG's. When we look at the number of black residents from—black graduates applying for residency programs, they have little chance of getting into residencies of their first choice.

Senator KENNEDY. How many unfilled residencies are there now?

Mr. FISHER. In different specialties, the number varies. I doubt that there is any single residency specialty group that has a 100 percent completion.

But the problem becomes also the location of those programs.

Senator KENNEDY. What is your position on FMG's then?

Mr. FISHER. The association has taken the position that there should be some changes with regard to how we allow FMG's to move into the country en masse. We have roughly 10 times as many FMG's in this country as we have black doctors. There are more licensed Filipino doctors in this country than there are black doctors.

We would suggest FMG's be required to meet a much stronger standards for admission, and they also should become fluent in English.

Senator KENNEDY. What is the number of blacks in medical schools? What percentage this past fall?

Mr. FISHER. 1974-75, I believe there were 3,356 blacks which comprise about 8 percent of the total. That is a substantial increase from what it was in 1968 when there was about 2.3 percent.

It is still less than our proportional representation in the population as a whole. We comprise basically 11.3 percent of the population, so we are still under-represented in the medical schools.

Senator KENNEDY. You do not believe that with a scholarship program, that is going to provide, hopefully, at least 50 percent of every entering class that would be based upon scholarship programs; that it would be an opportunity for blacks, as good an opportunity as the present system?

Mr. FISHER. I believe under such arrangement we might have improved prospects for increasing black enrollment in medical schools, if there are other aspects of the legislation that are expanded.

For example, section 774, which deals with the health manpower initiative awards, would have to be expanded and put at a level where activities, which bring about the recruitment and motivation of direction of blacks to medicine, might be spared because of funds available to do so.

Senator KENNEDY. Do you favor 50 percent for scholarship program for the class?

Mr. FISHER. A specific number is hard to say whether or not we would favor. We certainly favor an increase. We would have to rely on the wisdom of the committee which has much more information available to it to make a decision about what the proportion ought to be.

Senator KENNEDY. If there are that number that have it, is it your feeling that there will be greater representation of blacks, that they will be able to take advantage—if you have virtually a full scholarship program, what we are moving toward.

It seems to me you are limiting, therefore, the financial burden for any kind of students. They are going to be indebted obviously, and they are going to pay that off.



It seems to me eliminating the aspect of ability to pay would open up opportunities for those in our society that have not got financial resources.

Mr. FISHER. I would certainly agree by having that kind of financing available, that the prospects for increasing the number of blacks is certainly improved.

Senator KENNEDY. Well, if we accept that, then that has obvious implications. That is moving away from a voluntary kind of system, because we are requiring that they go in that direction, I mean as a condition for capitation.

Dr. KENNEY. I will proceed with the testimony.

The number of those seeking first-year residencies in family medicine exceeds available openings.

During the years 1968 to 1973, there was a 69-percent increase in the number of physicians entering primary care specialities. In 1968, a total of 4,604 first-year residents were in the "primary care" specialities of family medicine, general practice, internal medicine, obstetrics, and gynecology and pediatrics. By 1973, the number of first-year residencies in these primary fields had reached 7,783 5-year students.

The shift which projections suggest is continuing has taken place because of student interest, action of the medical schools, as well as increases in approved residencies.

We urge that in lieu of rigid controls on residency programs, it would be better to support, as does the House-passed H.R. 5546, full-time departments of family medicine offering 3-year residencies in this primary area of medicine.

Similarly, we commend as an alternative to tight Federal regulation of residencies, the enactment of the provisions found in S. 989, the Kennedy bill, and S. 1357, the Beall bill, authorizing support for family-medicine residencies in teaching hospitals, including fellowships for those engaged in the study of family medicine.

Senator KENNEDY. What is your sense about the needs of blacks in the urban areas? Is it for primary care? What do they need most?

Dr. KENNEY. Senator Kennedy, it goes all over the list. They do need primary care. May I point out here that almost 60 to 70 percent of the members of the National Medical Association are engaged in primary care at present?

Certainly, an inner city does need the primary care. But it also needs specialists.

For example, now I am most familiar with my own specialty of dermatology, and there are less than 100 qualified dermatologists, black dermatologists, in the whole country. There are many cities in the country, for example, Pittsburgh, Houston, Tex., to name but two, and there are many others, that do not have one black dermatologist.

And I might say parenthetically that lesions on black skin look a lot different than they do on white skin. White doctors confess themselves are somewhat at a loss when they have been used to the landmarks of redness of the skin and other skin signs is diagnostic guideline or landmark, and they look at black patients, and there is no redness to be seen, because the patient is all black.

Therefore, we do need specialists who are trained to handle black problems.

One could expand on that because of mores and other concerns, but to come back to your main question, there is certainly a need for all kinds of people in the inner-cities.

I think a little later in our testimony we refer to the fact that we think in establishing underserved areas, perhaps the ghetto or inner-city areas, might be bypassed. We would like to have your committee to look, sir, as you draw up guidelines for such proposed legislation, to consider this aspect as well.

National standards for licensure. We have seen no data to suggest the need for national standards of practice and relicensure such as is embodied in S. 989. We believe that self-assessment by physicians and efforts at recertification by specialty boards should be exhausted before taking this unprecedented step.

Senator KENNEDY. How exhausted do we have to be? I have been chairman of this committee for almost 5 years. We have listened to the same arguments 4 years ago, 5 years ago. We have seen with the exception of the primary care physicians virtually little, if anything, done by the specialists.

Dr. KENNEY. Well, I am not in a position to tell specialty by specialty. I do know that certain medical societies, I believe the State of Washington, and Mr. Fisher may be able to help me, the State of Washington has made a requirement of its members, that in order to maintain their State society membership, that they must show a certain amount of postgraduate education, and other States, the State of Maryland, I believe has a similar set up, and I believe there is a movement which is growing in each specialty as well.

I know, as I say, the American Board of Internal Medicine and the American College of Physicians has set up an intermural exam which members are encouraged to take. There is no force as yet. But I think the whole trend is moving in that direction, not only with these organizations, but with others as well.

Senator KENNEDY. We have heard some rather interesting statistics here about the number of people on medicaid that have all of these various and unnecessary medical procedures that are practiced on them—four times as many tonsillectomies in California, three or four times as many hysterectomies. And that is made up obviously by a greater number of whites than blacks, but a substantial number of blacks.

How do you get a handle on it? What has been the position of your organization in trying to do something about it?

Dr. KENNEY. Yes, Senator, I agree with you.

Senator KENNEDY. This is what we are trying to drive at in trying to get the right number of residencies, and we want to make sure we are going to have qualified personnel that are practicing in these various kinds of fields.

Then we come back to your testimony in favor of doing business as usual. That is a thing that kind of surprises me, quite frankly.

I am interested in what your organization, what message you bring to us about your sense of urgency on this factor.

Have you found this to be so? These are statistics that have been presented to us. You have got the people out there in contact with tens



of millions of people of this country, and I want to know whether you are concerned about it.

We are trying to deal with it here, and I would like to know if you have a sense of urgency about it. I must say, quite frankly, you do not appear to have it. You are talking about self-assessment, and talking about not getting rigid controls. You say we ought to keep our system of voluntarism.

You are finding hundreds of thousands of kids being operated on that never should be, and tens of thousands of women getting operated on, and those that are poor, and a very substantial group of those are minorities, and you are here speaking for black doctors.

I want to hear what you think we ought to be doing about it.

Dr. KENNEY. Senator, certainly I cannot take the burden of the whole medical professional along these lines. I do not attempt to do that. In general, the National Medical Association has supported, and asked for PSRO efforts which, as you know, attempt to monitor the standards of care in the profession, and in general, for example, I think that a good many of the National Medical Association members are on the Board of the National Capital Medical Foundation, which is here in Washington, for example, the PSRO organization.

I think that, for example, the hospital here, Howard University Hospital Committee, PSRO Committee, has been especially commended for its efforts in these directions.

Al, would you care to add to the Senator's question?

Mr. FISHER. I would like to add that representing less than 2 percent of the physicians in America, certainly the kinds of situations that you speak of, we are well aware of. But having such a small number of members, it certainly does not indicate that many of our members are guilty of many of the things that are described here.

Senator KENNEDY. That is right. But that is not the point. We are trying to figure out how you alter or change the system.

You are speaking here for black doctors. I would think black doctors have probably as much to do, probably a good deal more than anyone else with regard to minorities.

Mr. FISHER. They do, for example, in New York City, where we have approximately 600 black doctors, and there are five PSRO governing councils, and on none of those governing councils do we have blacks sit on the board. In the very organizations that we are set up to police, the profession, we are not represented there also.

Senator KENNEDY. You have made the point that I was making. You still are suggesting here that we go along with the existing system?

Mr. FISHER. We are saying basically that the profession has the responsibility to police itself.

Senator KENNEDY. What are they doing? Are you satisfied?

Mr. FISHER. We are not satisfied with the way the profession is dealing with itself. It seems that Federal legislation ought to lay out parameters of what ought to be done. It should give a time frame, and if the profession does not move within the time frame, then we have to have legislation to mandate.

Senator KENNEDY. We have been here for 5 years, the same points have been mentioned, and it is business as usual.



Mr. FISHER. I think the points have been mentioned, and I think the information has been passed on to professional associations that this is what is desired, but no timetable has been set by legislation which says by a certain date we should have certain things done. Otherwise, the Federal Government moves in.

Dr. KENNEY. Senator, could I respectfully suggest that I think the tenor of today's environment, and your own concerns, as expressed in legislation and in commentaries, is all in the direction of requiring professional groups with self-regulation.

I would also cite the law profession, for example, and statements by the Chief Justice about the need for higher standards in the law, and higher standards among lawyers, and feel that the entire context today is moving toward self-regulation, and that the system, even though it has been 4 or 5 years, sir, as you suggest, that with the prospect of forceful Government intervention, if the societies do not look after themselves, and if the lawyers do not, and if other professional groups do not self-regulate themselves, I would suggest that the specter of Government intervention in making these societies, all of us, the National Medical Society, the American Medical Society, and any other group, the legal profession, all moving in this direction.

I think we are moving, and I think it is forward movement. It just is not status quo, but we are going forward trying to establish a way of policing ourselves. Certainly no one can hold up—I think it is a very, very small minority of doctors who are engaged in these practices of too many tonsillectomies, and so on, and things of that sort, and we are attempting to move in the right direction.

We must, by reason of our composition always be primarily concerned with the fact that blacks are significantly underrepresented in the health professions, most especially in the specialties.

The number of blacks in the first year of medical school in the 1968-69 academic year was but 2.7 percent of all first-year enrollment. By academic year 1973-74, the black first-year enrollment had reached 7.2 percent of all first-year enrollment. During the last 2 years the black enrollments remained stable. See House Report 94-266, part 2 and page 61, second testimony of Assistant HEW Secretary Cooper, noted in footnote 1.

We endorse the provisions of S. 996, the administration bill, S. 989, the Kennedy bill, and S. 1357, the Beall bill, all of which commonly expand the existing health manpower education initiative awards under section 774 of the PHS Act. These bills would provide stipends to persons who, due to socioeconomic factors, are financially disadvantaged so that they may be enrolled in post secondary education programs so as to qualify them for enrollment in health professions schools.

This type of legislation is fully justified in that 20 percent of blacks in medical schools are from families with less than \$5,000 per year income, and 67 percent are from families with less than \$10,000 per year income. Nevertheless, these bills do not go far enough.

One factor that is not in our printed testimony, that I might cite, is that a large number of our medical students come to that first year of medical school already encumbered by terrific debt, which they

have incurred, of families have incurred, to even get them through the first 4 years of college. Thus the economic strain is even greater than might ordinarily seem to appear on the surface.

We endorse the Assistant Secretary of Health's proposal given to this committee on September 16. Dr. Cooper urged a no strings attached scholarship program for the disadvantaged during the entry year of medical school, plus a scholarship program for supplementary training following the baccalaureate degree if needed to qualify for admission to medical school.

Worthy though these measures be, they necessarily assume that most, if not all blacks, lack academic preparation. We feel, on the other hand, that there are a number of blacks who are academically qualified after the baccalaureate degree but who, due to low income backgrounds, and heavy undergraduate debts, abandon efforts to seek an M.D. or D.D.S. degree.

We would propose in the same vein that aid is directed to the disadvantaged but in need of additional academic training, that aid be directed to the qualified, but debt ridden low income background minority graduate in order that he will be induced to enter medical or other health professions school.

Such an effort would require no strings attached entry year scholarship, and that upon completion of the entry year of health professions schools the Government would cancel any debt owing the United States by reason of undergraduate training, or to assume any private debts attributable to undergraduate education of the student successfully completing the entry year.

Adoption of this type of loan forgiveness would truly expand the pool of black students who are qualified in every way for medical school admission, but who would not apply because of his/her low income background and/or undergraduate indebtedness.

We strongly disagree with all the bills S. 996, S. 989, S. 1357, and the House passed H.R. 5546 in that they all would allow the provisions of section 780 of the Public Health Service Act to expire. Section 780 is authority for "no strings attached" scholarships up to \$3,500 per year per student with awards restricted to students of exceptional financial need.

While we take cognizance of the desirability of programs calling for payback in terms of service in shortage areas for medical school scholarships—such as the national health service corps program and the physician shortage area scholarship program discussed below—there will always be a need for health professions scholarships for students in exceptional financial need who cannot borrow money for schooling.

Students in exceptional financial need should not unless they desire the greater financial inducements available through the national health service corps and physician shortage area programs, as provided in S. 989 and S. 1357 respectively, be required to repay either in money or periods of assigned service the costs of their medical education.

It is manifest to us, given the low income backgrounds of the pool of potential black applicants to medical school, that it is the height of folly to eliminate the no-strings-attached health professions schol-



arships for students of exceptional financial need, we urge appropriate amendments to continue this vital program.

The NHSC and physician shortage area programs would, under all the bills before you, be the sole Federal resource for Federal financial assistance to students under scholarship.

The NMA has strongly condemned the provisions of the House passed H.R. 5546, which would require the medical school, as a condition of deriving continued operating support from the Federal Government, to enter into a legally binding agreement with students requiring them to repay to the Government the amount of Federal operating support supplied to the medical school, which is attributable to the student's enrollment in medical school.

H.R. 5546, as adopted by the House, would require the student, as his personal obligation, to repay the Federal Government those amounts which the Federal Government has supplied the medical school in operating support under the capitation authority of the Public Health Service Act. This portion of H.R. 5546 is without precedent and discriminatory against medical students and doubly discriminatory against low income background health professions students, most of whom are black.

Inasmuch as H.R. 5546 is so drawn to allow an individual subject to this type repayment obligation to cancel the debt by service in the national health service corps or service in the Armed Forces, the low-income student quite likely would be forced to join the NHSC or the armed services, even if having neither interest nor aptitude for this type of practice. The committee should clearly reject the personal payback cancelable by NHSC or armed service duty payback features of the House bill.

In this connection, we believe it important to note the resolution of NMA's House of Delegates adopted at its August 1975 convention in Miami Beach, Fla.

NMA's opinion with respect to legislation now before Congress which would require the student to repay to the Federal Government the cost of medical school aid provided to his school, but with no dollar assistance to the student . . . is too harsh an exaction to place upon medical students. The operative effect is to place students in a condition of involuntary servitude . . . (which) the National Medical Association strongly opposes.

Similarly, and for reasons inherent in the quoted August 1975 Miami resolution, NMA opposes the domestic health professions draft features of S. 989—Kennedy bill—and S. 1357—Beall bill. The Beall bill would only require 25 percent of the student body to serve in medically underserved areas. If the student chooses as a member of the NHSC, whereas the Kennedy bill would require all to serve if selected as a member of NHSC, both have as their purpose a manpower pool upon which the NHSC could draw.

While we have no objection to either the national health service corps or the physician shortage area program, both of which are continued under the terms of S. 989—Kennedy bill—it is our conviction that these programs should not be the only scholarship program available to health professions students.



Moreover, the participation should be voluntary, sold on each program's merits, and not staffed, as is the obvious intent of both by reasons of a domestic health professions draft.

The NMA believes that the physician shortage area scholarship program, as it would be extended in S. 1357—Beall bill—is a desirable alternative to the national health service corps scholarship program, in that it would allow a student control in the selection of the area where he would perform his obligatory service. Students who join NHSC will go anywhere the Government decides.

S. 1357 is salutary in that it emphasizes primary care practices and would assure an income to participating physicians equal to that paid NHSC physicians. Physicians participating beyond the obligatory 2 years would be eligible for \$25,000 in grants with which to establish a private practice in a medically underserved area.

We are very concerned that the national health service corps program, under the various bills before the committee are so drawn as to virtually insure that inner-city neighborhoods will be bypassed. As of July 1, 1974, the NHSC has established health services in 206 communities, but 85 percent of these were in rural areas.

The NHSC has been justly criticized for its failure to give sufficient emphasis to the needs of urban inner-city areas which have populations experiencing critical shortages of access to personal health care services. See House Report 93-1509, at page 34.

All bills before the committee assume that there will be some non-profit or public sponsor which will take responsibility for the actual operation of the national health service field stations. In point of fact, S. 989, S. 1357, and S. 1753 would authorize financial aid to the groups applying for assignment of PHS personnel to areas having medically underserved populations for the creation of medical practice management systems which local groups must establish in order to qualify for an NHSC field station.

The House-passed bill—H.R. 5546—would go so far as to require the local sponsoring organization to collect for services rendered and pay the United States for the costs of operating the NHSC projects.

These provisions would prove onerous to those communities which are least equipped to sponsor NHSC projects—but which need them the most. We urge that the committee waive any requirement of local sponsorship of an NHSC field station where it appears that the community lacks in essential resources to sponsor such an undertaking, but is so lacking in personal health services that designation of the population involved as a medically underserved population is otherwise warranted.

Moreover, funds should be reserved in the authorizing for the costs of directly managed HEW projects in areas determined to be lacking in a sponsor qualified to manage a HEW-NHSC project.

Senator, this ends the formal statement, as you can see, sir.

Senator KENNEDY. Fine, thank you very much.

Just really one question.

As you well understand, there is enormous disparity between the growth of health manpower in this country and the maldistribution of

medical personnel in the inner cities, in rural areas, and in the maldistribution among specialties. I am just wondering what I can take away from your testimony that is going to help resolve that problem.

I am not sure that the approach I have is going to answer it. I think it is going to make some useful contributions. I do not minimize the complexity of it.

It seems to me that, well, you want to give the status quo another try.

I am just wondering what I can point to in your testimony which is going to help get a medical school graduate to serve there.

Dr. KENNEY. Al, would you answer that?

Mr. FISHER. I would suggest we should take a look at who is in the inner city now practicing.

We would discover, proportionally, there are more black physicians in the inner city that do practice there. By increasing the numbers going into medical education at any level, we certainly improve the chances for getting service there on a permanent basis.

Senator KENNEDY. You show me the basis for that statement. You show me the basis for that statement, that by increasing the number of doctors in the country, that we are increasing the chances that they are going to go practice in the inner city. You show me the basis of any study that you can put your hands on to show that to be the case.

Mr. FISHER. I think we have some data that has been gathered on black physicians which indicates that they, more so than their counterparts, are in the inner-city areas practicing.

Senator KENNEDY. What proportion of black physicians are practicing in the inner city today?

Mr. FISHER. I would say in our membership approximately 75 percent in urban inner city areas.

Senator KENNEDY. In inner city, or are they living out in Beacon Hill and practicing down in Roxbury?

Senator KENNEDY. Well, if you could provide the information on this practice, but the bulk of practice is directed at inner-city patients.

Senator KENNEDY. Well, if you could provide the information on this because it is contrary to all the testimony that we have received here, not percentage of blacks, but the whole movement in terms of a national problem, of the number of doctors in those inner cities, the total numbers are in a constant state of decline.

This is the information we have had week after week, month after month, and year after year. If you have other information that shows to the contrary, then I am interested in it.

Dr. KENNEY. We will try to give you that information.

I think our membership, as Mr. Fisher has just said, the bulk of them practice in the inner city, and I would say that is true here in Washington, D.C., and other large cities, the bulk of our people are practicing in the inner cities.

[The prepared statement of Dr. Kenney follows:]



STATEMENT OF THE NATIONAL MEDICAL ASSOCIATION

RE: Proposed Health Manpower Legislation

S-989 - "The Health Professions  
Educational Assistance  
Act of 1975"

S-1357 - "The Health Manpower and  
Shortage Area Assistance  
Act of 1975"

Before the Subcommittee on Health  
Labor and Public Welfare Committee  
United States Senate

by

John A. Kenney, Jr., M.D.

and

Alfred F. Fisher

October 31, 1975

Mr. Chairman and Members of the Subcommittee:

I am Dr. John A. Kenney, Jr., Chairman of the Committee on Medical Legislation of the National Medical Association, Inc. (NMA). With me is Mr. Alfred F. Fisher, Executive Director of the NMA. NMA is pleased to have this opportunity to make known its views on the proposed Health Manpower Legislation, namely S-989 and S-1357.

As the organization which represents the Nation's 6,000 Black Physicians, NMA is well aware of the overall national health manpower picture, particularly as it relates to Blacks, and other minorities. Recognizing that available, accessible and continuous health care for all Americans is the desired outcome from all of the proposed health manpower legislation, we have developed our comments on the various bills accordingly.

(1945)



While we touch upon the Administration's proposal to reduce capitation support for the Nation's health professions schools, medical residency programs, and national licensure of physicians and dentists, we intend to focus upon the adequacy of measures now before you to overcome the continuing significant under-representation of Blacks and other minorities in the Nation's health professions schools.

### Generalized Concerns

#### A. Capitation Support

We are not surprised, but dismayed that S-996, the Administration's health manpower bill, would gradually phase out capitation payments to medical schools, such that by F.Y. 1977, the support for each student would be so little as \$1,000 per student. This represents a decline from the present \$2,500 per year for each first, second, and third year students and \$4,500 per graduate. We are in complete disagreement with the assertion that the tax payers should not be called upon to subsidize the professional training of physicians, dentists, and other health professionals.

The Administration ignores the fact that medical schools and other health professions schools are national resources in their own right, and among the most costly of all educational institutions, which in many cases are too

costly for students and local governments to maintain without partial Federal subsidy, given the increasing demands placed upon States and local governments for other services.

B. Medical Residencies

The House struck Title VIII from 5546. Title VIII, in essence, would have limited first year residencies to 125 percent of medical graduates in any given year. Such 125 percent limit on the number of first year residencies is essentially the same type of restriction on first year residencies found in S.989 (see pages 128 to 148).

While we share with the proponents of control over residencies the concern for geographic and specialty imbalance, we question the need for rigid Federal controls on residencies, until our unregulated system has had opportunity to redress the imbalance between primary and non-primary care.

The number of those seeking first year residencies in family medicine exceeds available openings.<sup>1/</sup> During the years 1968 to 1973, there was a 69 percent increase

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1. See Sept. 16, 1975 statement of the Assistant Secretary for Health before the Senate Subcommittee on Health, at page 52

in the number of physicians entering primary care specialties. In 1968 a total of 4,604 first year residents were in the "primary care" specialties of family medicine, general practice, internal medicine, obstetrics and gynecology, and pediatrics. By 1973, the number of first year residencies in these primary fields had reached 7,783 five year students,

The shift which projections suggest is continuing has taken place because of student interest, action of the medical schools, as well as increases in approved residencies.<sup>2/</sup>

We urge that in lieu of rigid controls on residency programs, it would be better to support, as does the House passed HR 5546, full time departments of family medicine offering three year residencies in this primary area of medicine.

Similarly, we commend as an alternative to tight Federal regulation of residencies, the enactment of the provisions found in S.989 (the Kennedy Bill), and S.1357 (the Beall Bill), authorizing support for family medicine residencies

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2. See Feb. 21, 1976 Statement of Drs. Tom E. Nesbitt and C. H. William Ruhe (American Medical Association) before the House Subcommittee on Public Health and the Environment, at page 20.



in teaching hospitals, including fellowships for those engaged in the study of family medicine.

C. National Standards for Licensure

We have seen no data to suggest the need for national standards of practice and relicensure such as is embodied in S.989. We believe that self assessment by physician and efforts at recertification by specialty boards should be exhausted before taking this unprecedented step.

We must by reason of our composition always be primarily concerned with the fact that Blacks are significantly under-represented in the health professions, most especially in the specialties.

The number of Blacks in the first year of medical school in the 1968-1969 academic year was but 2.7 percent of all first year enrollment. By academic year 1973-1974, the Black first year enrollment had reached 7.2 percent of all first year enrollment. During the last two years the Black enrollments remained stable. See House Report 94-266, 2 & page 61, 2nd testimony of Assistant HEW Secretary Cooper, noted in foot note one.

We endorse the provisions of S.996 (the Administration Bill), S.989 (the Kennedy Bill), and S.1357 (the Beall Bill),

all of which commonly expand the existing Health Manpower Education initiative awards under Section 774 of the PHS Act. These bills would provide stipends to persons who due to socio-economic factors are financially disadvantaged so that they may be enrolled in post secondary education programs so as to qualify them for enrollment in health professions schools.

This type of legislation is fully justified in that 20 percent of Blacks in medical school are from families with less than \$5,000 per year income, and 67 percent are from families with less than \$10,000 per year income. Nevertheless, these bills do not go far enough.

We endorse the Assistant Secretary of Health's proposal given to this Committee on September 16. Dr. Cooper urged a no strings attached scholarship program for the disadvantaged during the entry year of medical school, plus a scholarship program for supplementary training following the baccalaureate degree if needed to qualify for admission to medical school.

Worthy though these measures be, they necessarily assume that most, if not all Blacks, lack academic preparation. We feel, on the other hand, that there are a number of Blacks who are academically qualified after the Baccalaureate degree but who due to low income backgrounds and heavy undergraduate debts abandon efforts to seek an M.D. or D.D.S. degree.

We would propose in the same vein that aid is directed to the disadvantaged but in need of additional academic training, that aid be directed to the qualified, but debt ridden low income background minority graduate in order that he will be induced to enter medical or other health professions school. Such an effort would require no strings attached entry year scholarship, and that upon completion of the entry year of health professions schools the Government would cancel any debt owing the United States by reason of undergraduate training or to assume any private debts attributable to undergraduate education of the student successfully completing the entry year. Adoption of this type of loan forgiveness would truly expand the pool of Black students who are qualified in every way for medical school admission but who would not apply because of his/her low-income background and/or undergraduate indebtedness.

We strongly disagree with all the bills (S.996), (S.989), (S.1357), and the House passed H.R. 5546 in that they all would allow the provisions of Section 780 of the Public Health Service Act to expire. Section 780 is authority for "no strings attached" scholarships up to \$3,500 per year per student with awards restricted to students of exceptional financial need.

While we take cognizance of the desirability of programs calling for payback in terms of service in shortage areas for medical school scholarships (such as the National Health Service Corps program and the Physician Shortage Area Scholarship



program discussed below) there will always be a need for health professions scholarships for students in exceptional financial need who cannot borrow money for schooling.

Students in exceptional financial need should not, unless they desire the greater financial inducements available through the National Health Service Corps and Physician Shortage Area programs, as provided in S.989 and S.1357 respectively, be required to repay either in money or periods of assigned service the costs of their medical education.

It is manifest to us, given the low-income backgrounds of the pool of potential Black applicants to medical school, that it is the height of folly to eliminate the no strings attached health professions scholarships for students of exceptional financial need, we urge appropriate amendments to continue this vital program.

The NHSC and Physician Shortage Area programs would under all the bills before you be the sole Federal resource for Federal financial assistance to students under scholarship.

The NMA has strongly condemned the provisions of the House passed H.R. 5546, which would require a medical school (as a condition of deriving continued operating support from the Federal Government) to enter into a legally binding agreement with students requiring them to repay to the Government

the amount of Federal operating support supplied to the medical school, which is attributable to the student's enrollment in medical school. H.R. 5546, as adopted by the House, would require the student, as his personal obligation, to repay the Federal Government those amounts which the Federal Government has supplied the medical school in operating support under the capitation authority of the Public Health Service Act. This portion of H.R. 5546 is without precedent and discriminatory against medical students and doubly discriminatory against low-income background health professions students, most of whom are Black.

In as much as H.R. 5546 is so drawn to allow an individual subject to this type repayment obligation to cancel the debt by service in the National Health Service Corps or service in the Armed Forces, the low income student quite likely would be forced to join the NHSC or the Armed Services, even if having neither interest nor aptitude for this type of practice. The Committee should clearly reject the personal payback cancellable by NHSC or Armed Service, duty payback features of the House bill.

In this connection, we believe it important to note the Resolution of NMA's House of Delegates adopted at its August 1975 Convention in Miami Beach, Florida, "NMA's opinion with respect to legislation now before Congress which would require

the student to repay to the Federal Government the cost of medical school aid provided to his school, but with no dollar assistance to the student is . . . too harsh an exaction to place upon medical students. The operative effect is to place students in a condition of involuntary servitude . . . (which) the National Medical Association strongly opposes."

Similarly, and for reasons inherent in the quoted August 1975 Miami Resolution, NMA opposes the domestic health professions draft features of S.989 (Kennedy Bill) and S.1357 (Beall Bill). The Beall Bill would only require twenty-five percent of student body to serve in medically underserved areas, if the student chooses as a member of the NHSC, whereas the Kennedy Bill would require all to serve if selected as a member of NHSC, both have as their purpose a manpower pool upon which the NHSC could draw.

While we have no objection to either the National Health Service Corps or the Physician Shortage Areas program, both of which are continued under the terms of S.989 (Kennedy Bill) and S.1357 (Beall Bill), it is our conviction that these programs should not be the only scholarship program available to health professions students. Moreover, the participation should be voluntary, sold on each program's merits and not staffed, as is the obvious intent of both by reason of a domestic health professions draft.



The NMA believes that the Physician Shortage Area Scholarship program, as it would be extended in S.1357 (Beall Bill) is a desirable alternative to the National Health Service Corps Scholarship program, in that it would allow a student control in the selection of the area where he would perform his obligatory service. Students who join NHSC will go anywhere the Government decides. S.1357 is salutary in that it emphasizes primary care practices and would assure an income to participating physicians equal to that paid NHSC physicians. Physicians participating beyond the obligatory two years would be eligible for \$25,000 in grants with which to establish a private practice in a medically underserved area.

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All bills before the Committee assume that there will be some non-profit private or public sponsor which will take responsibility for the actual operation of the National Health Service field stations. In point of fact, S.989, S.1357, and S.1753 would authorize financial aid to the groups applying for assignment of PHS personnel to areas having medically underserved populations for the creation of medical practice management systems which local groups must establish in order to qualify for an NHSC field station. The House passed Bill (H.R. 5546) would go so far as to require the local sponsoring organization to collect for services rendered and pay the United States for the costs of operating the NHSC projects. These provisions would prove onerous to those communities which are least equipped to sponsor NHSC projects--but which need them the most. We urge that the Committee waive any requirement of local sponsorship of an NHSC field station where it appears that the community lacks in essential resources to sponsor such an undertaking, but is so lacking in personal health services that designation of the population involved as a medically underserved population is otherwise warranted. Moreover, funds should be reserved in the authorizing for the costs of directly managed DHEW projects in areas determined to be lacking in a sponsor qualified to manage a DHEW-NHSC project.

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Senator KENNEDY. We want to thank you very much for taking the time.

The subcommittee stands in recess.

[Whereupon, at 12:02 p.m., the subcommittee adjourned subject to the call of the Chair.]

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